

JPRS Report

Proliferation Issues

PROLIFERATION ISSUES

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28 October 1992

[This report contains foreign media information on issues related to worldwide proliferation and transfer activities in nuclear, chemical, and biological weapons, including delivery systems and the transfer of weapons-relevant technologies.]

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SOUTH AFRICA

Israeli Defector Discloses 'Saddamgate' Role

MB1610112492 Johannesburg WEEKLY MAIL in English 16-22 Oct 92 pp 1, 2

[By Arthur Gavshon in London]

[Text] A top Israeli intelligence defector has made startling allegations about South African involvement in the "Saddamgate" scandal that is threatening U.S. President George Bush's re-election campaign.

Ari Ben-Menashe was for 12 years at the nerve centre of Israel's global intelligence operations for two years a special intelligence adviser to former Israeli prime minister Yitzhak Shamir.

In a controversial book just published in the US, Ben-Menashe claims South Africa's Armscor [Armaments Corporation of South Africa] co-operated with Unites States foreign policy in the Gulf by supplying Iraq with artillery and missiles capable of carrying nuclear warheads with the approval of then vice-president Bush in the 1980's.

He also claims the son of former British prime minister Margaret Thatcher is an arms dealer.

Bush's involvement has become a major American election issue. Other startling claims in Ben-Menashe's book, *Profits of War: Inside the Secret US-Israeli Arms Network*, are:

- —Thatcher's son, Mark, is "an established arms dealer" who helped bring weapons into South Africa in breach of the world arms embargo.
- —Bush personally encouraged sales of technology, unconventional weaponry and other materiel to Saddam Husayn's government in Iraq from at least 1985.
- —South Africa and Chile were selling arms to Iraq with backing from Washington, which was trying to cultivate Saddam as an ally against Iran's revolutionary government at the time.
- —Mark Thatcher was a close friend of General Pieter van der Westhuizen, head of the SADF's [South African Defense Force] Department of Military Intelligence (MI) in the 1980's. (This is not General CP van der Westhuizen, the current chief of MI).
- —Thatcher used his contact with Pretoria's intelligence chief to become involved in South Africa's covert arms deals with Israel, Chile and Iraq, often through a company based in Texas.
- —Thatcher was instrumental in setting up a meeting between Canadian scientist Gerald Bull, who helped Armscor develop the G-6 mobile cannon. Bull, who later went on to collaborate with Iraqi scientists on the development of a super cannon is believed to have been assassinated by Israeli agents.
- —Armscor provided Iraq with the technology needed to produce nuclear-tipped warheads with endorsement from

- the CIA. German scientists and other European firms helped Saddam's nuclear weapons programme, with Chile providing the chemicals.
- —The book says Armscor provided Carlos Cardoen, Chile's most notorious arms maker and dealer, with a licence in 1979 to manufacture and trade in arms after the Israeli's refused to do business with the Chilean.

Cardoen then allegedly became involved in the covert arms industry and, with the help of an unnamed Armscor official, met the deputy chief of Iraq's General Staff Procurement Agency in Baghdad.

Armscor had a meeting with Bull, who was seeking to advance his long-range "supergun" in 1983. Thatcher was instrumental in setting the meeting up, says Ben-Menashe.

Thatcher did this by introducing Bull to Van der Westhuizen. The general arranged a meeting between Bull and his Armscor contacts.

Ben-Menashe claims Armscor "actually contracted this artillery (supergun) project with him (Bull)". But things went wrong when Bull was arrested in the US for exporting military technology to South Africa in violation of the UN embargo.

"This is at a time when the US was secretly shipping arms to South Africa," observes Ben-Menashe.

The author says one of his missions was a visit to Pretoria in November 1988 for talks with Van der Westhuizen. The general told him South Africa that month had complied with the Israeli pressure to cut arms supplies to Iraq.

But, he added the Americans had been "smuggling" material and technology to the Republic for onward delivery to Iraq; also Van der Westhuizen identified "a Texas company owned by Thatcher that was moving equipment to Iraq directly from Britain".

The general confirmed "that Mark Thatcher did business with South Africa and had been doing so for a long time". He offered no details of the nature of that business or whether actual armaments or military technology were involved.

Ben-Menashe goes on to describe alleged efforts to eliminate him. He says Israeli authorities have denied all of his service as an intelligence officer and as an adviser to Shamir.

He writes extensively about Israeli's co-operation with South Africa in the development of nuclear weapons and claims that Israel test-blasted a nuclear device in the South Atlantic in 1979. Armscor help was crucial in that venture but the book throws doubts on CIA reports that it was South Africa that detonated this bomb.

One of the most controversial chapters alleges that an Israeli company installed a sophisticated computer in Transkei—then ruled by Pretoria's erstwhile ally, Kaizer Matanzima—which was used to compile information on thousands of anti-apartheid activists who were later killed by death squads.

Ben-Menashe defected from the Israeli secret service in 1990 after working for 12 years in its global intelligence operations, which he says was involved in a bid to stop the illicit flow of weapons to Iraq.

Profits of War: Inside the Secret US-Israeli Arms Net-work has just been published in America despite alleged threats on the author's life by Israeli agents and an abortive US \$2-million bribe to keep him quiet.

Efforts to have it published in Britain have been thwarted by English libel laws.

Spokesman Outlines ANC Views on Nuclear Issues

MB1610124592 Johannesburg Channel Africa Radio in English 1000 GMT 16 Oct 92

[Text] The African National Congress says it believes Africa should be nuclear free, and that a future South African Government will have to deal with the nuclear capacity of the country in a responsible way.

Speaking on nuclear issues at this week's ANC forum on environmental policy, Prof. Albie Sachs of the organization's environmental desk said the whole issue was shrouded in secrecy.

He said the public had the right to know whether South Africa had developed or tested a nuclear bomb, and if it was selling nuclear materials to other countries.

Prof. Sachs said nuclear power was a highly sensitive issue, which would have to be discussed nationally and internationally by a future government.

Future of Nuclear Fuels Industry Debated

93AF0051Z Johannesburg SUNDAY TIMES in English 13 Sep 92 p 1

[Article by Ciaran Ryan; words in boldface as published]

[Text] South Africa's nuclear fuels industry is a multi-million noose around the taxpayer's neck. The Government is budgeting to dole out R570-million this year for the Atomic Energy Corporation (AEC) to produce sales of a mere R134million [rands].

As with Mossgas, the nuclear fuel industry was developed for strategic reasons. Since 1987 it has cost the taxpayer more than R3.3-billion to make sales of only R521-million.

Another R1.5-billion will be spent in the next five years to produce nuclear fuel which could be imported at a fraction of that cost.

Johan Kruger, of the Bernard Price Institute at the University of the Witwatersrand, says: "This is an enormous amount of expenditure for very little return."

The money subsidises nuclear fuel production at Pelindaba, west of Pretoria. Annual sales of R90-million are made to Eskom's [Electricity Supply Commission] Koeberg power station. Koeberg pays international market prices for the fuel plus a small premium.

SA [Republic of South Africa] developed the uranium enrichment facility while Koeberg continued to obtain fuel from a foreign supplier—thought to be France—throughout sanctions.

Koeberg generates less than 6 percent of Eskom's output. AEC started to supply Koeberg in 1989 when sanctions were ending.

Prospects

AEC does not disclose the cost of developing the enrichment facility, but it is estimated at more than R1-billion.

Nearly 70 percent of the Department of Mineral and Energy Affairs 1991 budget of R1.07-billion was spent on nuclear energy.

SA's strategic industries have been identified by Reserve Bank Governor Chris Stals as a key reason for SA's economic woes. Finance Director-General Gerhard Croeser has indicated that there will have to be reduced support for these industries.

Export prospects in a market glutted by production from the former Soviet Union look dismal. AEC exports a small amount of enriched uranium.

Uranium spot prices touched a post-war low of \$7 a pound in 1991, but firmed this year.

AEC is negotiating with the Government as to who is responsible for repaying more than R450-million in loan stock issued more than a decade ago for the development of the nuclear industry.

SA signed the Nuclear Non-Proliferation treaty in 1991 and can in theory buy nuclear fuel from any one of the signatory nations. The AEC says there may be difficulties in practice.

SA was able to obtain nuclear fuel even before it signed the treaty.

AEC says a smaller than expected deficit will reduce its reliance on State assistance this year to about R413-million. The money will be used for operational expenditure. More than R200-million will go to offset the costs of producing nuclear fuel for Eskom, R88-million to technology development, R28-million to commercialised businesses and the balance of more than R100-million to run head office.

The R413-million in State funding—excluding loan repayments which are not disclosed—will generate sales of \$160-million in the current financial year.

AEC says nuclear fuel sales will fall by 25 percent from R90-million in 1992 to \$66.8-million in 1997.

The book value of AEC's assets is R600-million. The cost of the plant is unknown. But the assets are heavily marked down because the nuclear plant has a low resale value.

AEC employs about 3,400 people—down from 8,000 in 1986. It has embarked on a rationalisation and commercialisation drive to reduce State funding to R250-million by 1997, all of which will be spent on making nuclear fuel.

AEC's public relations manager Nic Lightelm says the uranium enrichment process will require continual State funding. But a cost-effective laser enrichment process is being developed.

"In 1995 we will have to decide whether we switch to uranium enrichment using the laser process. This will be much cheaper. We will only go ahead with uranium enrichment on a commercial basis."

Mr. Lightelm cannot say how much the laser process will cost to install.

"The nuclear business demands a long-term approach—10 to 15 years. Given a short-term approach of five years and the over-supply in the market, one should get out of the business.

"In the longer term there are indications of an upturn in nuclear power, in which case the returns will be lucrative.

"Once the industry is closed down in SA, it can never be started up again."

Mr. Lightelm says AEC has the capacity to supply two nuclear power stations with fuel. Pelindaba has a capacity of 300 tons of "separative work" a year. Mr. Lightelm says a minimum of 3,000 tons a year is required for a commercial return.

Overheads

AEC is reducing its dependence on State aid. By 1997 the nuclear division and general overheads will require R250-million a year. Non-nuclear fuel sales are projected to quadruple from R44-million in 1992 to R157-million in 1997 as AEC's 10 commercial businesses start to yield a return.

The group's industrial businesses, all focusing on high-tech markets, will be profitable within two years, generating sales of R100-million by 1994.

Mr. Lightelm says there will be no cross-subsidisation of nuclear fuel by the business division. Indirect costs will be recovered by individual businesses and capital expansion will be funded through open-market transactions. Dr. Kruger says the money "could have been spent in developing other energy forms. For example, the gas at Mossel Bay could have been used to fire an Eskom power station at very low environmental costs, rather than try to produce extremely expensive liquid fuel which will not be economic.

"The country has surplus generating capacity, but Koeberg alleviates pressure on coal-burning power stations in the Eastern Transvaal. This reduces pollution, but the costs are high."

Press To View Rocket Motor Test at Hangklip MB0810122092 Johannesburg SAPA in English 1155 GMT 8 Oct 92

[Text] Cape Town Oct 8 SAPA—Somchem will open its controversial Hangklip test range to the press on Manday [12 October] when a rocket motor is to the fired on the mountainside range off False Bay. The static test should last about 50 seconds, Somchem spokesman Paul Holtzhausen said on Thursday.

It will be the first time that the press has been officially invited to observe such a test after a Cape Town newspaper sneaked photographs of a rocket motor being fired earlier this year. Mr Holzhausen said the test firing formed part of an ongoing viability study on gaining South African access to the international commercial rocket industry. About 300 different tests would take place during the 50-second rocket fuel blast on the high security range.

Somchem is a subsidiary of Denel, the privatised offshoot of the former parastal armaments corporation, Armscor. The Somchem range near Rooi-els, a holiday village on False Bay's eastern shore, has drawn criticism from local rate-payers and environmentalists. Complaints first emerged in 1989 when local residents complained of explosions and possible pollution at the range, which straddles a dam supplying drinking water to Rooi-els. Rooi-els ratepayers have launched a Supreme Court action for the Somchem site to be closed down.

BULGARIA

Russian Experts Help Repair Kozloduy Plant

AU0810185292 Sofia Khorizont Radio Network in Bulgarian 1600 GMT 8 Oct 92

[Text] Today the Russian Embassy in Sofia asked the media to convey certain explanations concerning Russian participation in the repair work at the Kozloduy Nuclear Power Plant. Igor Kareyev, the embassy's economic counselor, announced that Russia has taken urgent measures regarding breakdowns in the Nos. 5 and 6 Reactor Units, and at the moment 30 Russian specialists are working at the nuclear plant.

Russian organizations are doing everything possible to fulfill orders and to complete the repairs as soon as possible.

IAEA Praises Reconstruction

AU2010182892 Sofia BTA in English 1443 GMT 20 Oct 92

[Text] Kozloduy, October 20 (BTA)—A mission of the International Atomic Energy Agency (IAEA) has been reviewing the implementation of the programme for reconstruction of Units One and Two of the Kozloduy Nuclear Power Plant for two days now. The programme aims to upgrade the older units' safety in line with international standards. The mission praised the work done so far. Unit Two is scheduled to go in operation at the end of November or in early December, and Unit One will be switched on next spring. The 440-MW [Megawatt] Unit Four went into operation this morning after an overhaul under a programme for the upgrading of its safety. One turbine is working at half capacity. Turbine 8 will go into operation in a few days because of vibrations in it.

The Kozloduy Plant is host of a one-week seminar organized by the IAEA. Experts from Czecho-Slovakia, Russia and Kozloduy will discuss the preparation of a data base on equipment failures in nuclear power stations.

Fate of Belene Nuclear Plant Undecided

AU2010104392 Sofia VECHERNI NOVINI in Bulgarian 14 Oct 92 pp 1, 3

[Article by Boryana Kostova: "Shilly-Shallying Continues About Fate of Belene Nuclear Power Plant"]

[Text] It is reported that the Filip Dimitrov government is once again going to clarify the fate of the Belene Nuclear Power Plant, and this will probably not be for the last time. Skeptical observers recall that furious, but fruitless, debates on the issue have been held on several occasions in the past. At least this is better than doing nothing, however.

The new development is that Deputy Prime Minister Ilko Eskenazi is reported to have been asked to investigate the problems in greater depth and to give a view on the draft resolution of the Council of Ministers that has been prepared. The contents of this document are almost identical with the proposal made by the Committee on Power Supply published in issue No. 14 of DUNAVSKO DELO on 10 April 1992. Paragraph 2 in each of the two mirror-image

draft documents proposes making the Belene site a duty-free zone, and this is apparently the stumbling block. According to many informed sources, Finance Minister Ivan Kostov and two or three other ministers do not want to hear a word about setting up such a zone, and their view is sure to prevail.

Georgi Nikolov, National Assembly deputy of the Parliamentary Union for Social Democracy for the town of Svishtov, comments that these disputes omit one very important point. Paragraph 1 of the draft resolution of the Council of Ministers is supposed to read: "Construction of the Belene Nuclear Power Plant is halted." It is evident that unless this issue is finally resolved, no one will make long-term investments in the region of the projected nuclear power plant. It is true that Minute No. 12 of the Council of Ministers session held on 6 February 1992 concerning the delivery of the nuclear reactor shell purchased from Czechoslovakia notes that "the construction of the nuclear reactor at the Belene site is halted." By stating this, the Filip Dimitrov cabinet adopted a decision that had already been made, however. We will remind our readers that as long ago as on 17 May 1990 the Lukanov cabinet put the project into cold storage, while in its Resolution No. 288 of 28 August 1991 the Council of Ministers headed by Dimitur Popov outlined measures "to overcome the problems arising from halting the construction of the Belene Nuclear Power Plant." Despite this, the plant's future remains unclear.

Some time ago, in response to a question from a National Assembly deputy, Prime Minister Filip Dimitrov stated: "We do not intend to engage in shilly-shallying over the nuclear energy industry...." What word other than shilly-shallying can one use to describe the government's stance, however, which, as stated in a Sofia daily a little less than a month ago, holds that the issue of the Belene Nuclear Power Plant will be settled by 1995-97? We calculate that by then the term of office of the "first democratically elected cabinet" will have expired, so let the next cabinet grapple with the problem.

German Firm To Buy 400 Tonnes of Uranium

AU1410132892 Sofia 24 CHASA in Bulgarian 9 Oct 92 pp 1, 8

[24 CHASA staff report]

[Text] Bulgaria will sell 400 tonnes of uranium to the German Uran Erzbau firm for 18 million dollars, REUTER reported, quoting Bulgarian Deputy Interior Minister Racho Petrov. The price is 45 dollars per kilogram.

The German Economy Ministry will provide us with between 20 and 30 million marks to restore the highly polluted land surrounding the uranium mines for crop cultivation.

Mr. Petrov said that we will first sell 360 tonnes of stockpiled uranium left over from the closure of many uranium mines. Newly mined quantities of uranium concentrate will also be sold.

Bulgaria, which supplied the raw materials for the first Soviet atomic bomb, has decided to close down its uranium mines by 1994 because of their inefficiency and the pollution they caused, REUTER mentioned. The annual uranium: production was about 600 tonnes.

Mr. Petrov pointed out that presently only four uranium deposits are being worked, while 13 have been closed.

Before 1990 Bulgaria exported all the uranium that it produced to the Soviet Union for reprocessing. In return it received uranium fuel rods for its nuclear power plant at Kozloduy. The state Rare Metals Enterprise canceled the contract with the USSR in 1991.

POLAND

Illegal Trade of Uranium Investigated

LD2110083292 Warsaw PAP in English 1322 GMT 20 Oct 92

[Text] Biala Podlaska, Oct. 20—The regional Prosecutor's Office in Biala Podlaska, eastern Poland, is conducting an investigation into the possession and illegal trade of metallic uranium, reported Prosecutor Kazimierz Szkodzinski on Tuesday.

Andrzej P. from the eastern city of Terespol was arrested for the possession of 1.5 kilograms of radioactive uranium which was found hidden in the bathroom of his house.

The Prosecutor's Office in Biala Podlaska was informed of the movement of uranium to Terespol by prosecutors from Brest where several persons have been apprehended for involvement in the illegal trade of radioactive materials. The investigation hopes to uncover the source of the radioactive isotopes.

Meanwhile, 150 million zlotys (about 10,750 U.S. dollars) has been allotted by the National Inspection of Environmental Protection for the purchase of a radiation control device to be installed at the border checkpoint in Lubieszyn, Szczecin Province, north-western Poland, which will aid in the detection of harmful radioactive substances.

Isotope Detection Devices Installed at Borders *LD1510222492 Warsaw PAP in English 1902 GMT*15 Oct 92

[Text] Krakow, Oct. 15—The installation has started of special devices for detecting isotopes at Poland's border crossings, and two of them are already working at the Polish western border, said president of the Polish Nuclear Energy Agency Jerzy Niewodniczanski.

He stated the devices installed under an agreement between his agency and the border guard would make it possible to detect big radiation sources.

ROMANIA

Cernavoda Plant To Be Operational in 1994

93BA0036A Bucharest TINERETUL LIBER in Romanian 25 Sep 92 pp 1-2

[Article by Dumitru Manolache: "Cernavoda Nuclear Plant Will Generate Power!"]

[Text] The largest power generation project in Romania's history is rapidly nearing the completion of its first unit. That is why, dear readers, we thought it appropriate to tell you about the project's progress and the operations outlook at what everyone knows as the Cernavoda Nuclear Plant. The information that follows was provided by Engineer Ionel Bucur, director general of the project.

The country's initial energy plan included the joint construction with the Soviets, of a nuclear power plant composed of two 44 MW groups at Slatina, on the river Olt; but after the destructive earthquake of 1977, the negotiations were cancelled because the Soviets did not provide any seismic protection assurance for the installation. Discussions were then conducted with Canadian partners, and the practical construction of the present project began in 1979.

The Cernavoda Nuclear Plant is located at the site of a former limestone quarry that supplied the Medgidia Cement Factory with its raw material. The excavation for the first reactor was completed in 1980. Four units were planned at first, and the decision to add the fifth was made in 1885. The project extended over a period of 12 years, but as we know, the schedule was extended several times because the Romanian economy was not prepared to support such an investment. The country's communist leadership planned to produce up to 80 percent of the project's components, and a large portion of the \$1 billion credit was invested in other objectives.

Unit 1 was 40 percent complete at the time of the 1989 revolution, and all work was stopped after the revolution. Every drawing, every design for Unit 1 was verified; corrections took an entire year.

In the fall of 1990, the Romanian government invited a group of specialists from the Atomic Energy Agency in Vienna to verify the condition of the project; twelve people worked for three weeks, ending up with 140 recommendations and comments, and setting one year as the target date for their implementation. During the summer of 1991, the team returned to Cernavoda, noted that 80 percent of the recommendations were had been followed, and determined that the project and the quality of the work did meet the requirements of international standards.

In August 1991, having observed that the project could not be completed, a new contract was negotiated with the Canadian partner, assuring a credit of \$400 million. Renel—the project company—delegated a Canadian consortium to manage the activity (construction completion, assembly, start of the first unit, personnel training, and operation for one and one-half years under the consortium's responsibility). More than 200 foreign specialists are currently at the site, and 61 Romanian specialists are now in Canada for training, with 30 more expected to go by January 1993. A firm date for starting the first unit has now been set for the end of December 1994.

The reorganization of activities and the determined approach to the work have led to progress in all areas: construction is 95-percent complete, mechanical assembly is 65-percent complete, and electrical assembly and automation is 25-percent complete. The first operational tests of the

Romanian equipment have been carried out, and the pressure test has confirmed the quality of the work.

Depending on the success of Unit 1, discussions will start for beginning the construction on Unit 2, and conservation work is presently underway for the other three units.

Until 1990, investments were estimated at 132 billion lei (at the 1988 exchange rate) for all five units. About 30 billion lei had been spent by the end of 1989, of which 15-16 billion for Unit 1. Added to these costs are the \$400 million assured by the Canadian partner, and another 90 billion lei (at the exchange rate of September 1990) to complete the first unit.

The plant operates with nuclear fuel obtained by processing natural uranium at Pitesti, and heavy water obtained at the Heavy Water Combine in Turnu Severin; 35 tons of this product were sent to Renel during this year.

In 1992 the government budget allocated 40 billion lei to this project; only 20 billion were offered, the rest being covered from the Renel budget.

As far as we understand, the connection of the first nuclear unit to the national power network represents 10 percent of the current power consumption.

But while everyone is optimistic about the date on which the first unit will be placed in operation, Cernavoda represents a sensitive point in the solution of difficult social problems. In a future issue of the newspaper, we will discuss all of them, as well as important dates regarding the Cernavoda Nuclear Plant.

BOSNIA-HERCEGOVINA

Tuzla Muslim Forces Threaten Chemical Attacks LD1010164692 Sarajevo Radio Bosnia-Hercegovina

LD1010104092 Sarajevo Radio Bosnia-Hercegovina Network in Serbo-Croatian 1400 GMT 10 Oct 92

[Statement signed by Commander Zeljko Knez on behalf of the regional command of Tuzla headquarters; place and date not given]

[Text] Because of the overall situation in our state, the disorganization of the government in Sarajevo, the betrayal of our partners [Bosnian Croatians] in the battle against the common enemy, the shameful surrender of Bosanski Brod and Bosnian Posavina, the international community's political games behind the scenes, the inefficiency of the United Nations, and because of the ruthlessness of the enemy, the command of the regional headquarters of the Tuzla region flargest and strongest Muslim-held area with a large chemical industrial complex near the city of Tuzla], supported by the organized political authorities, has been forced to undertake crucial steps in the defense of the people in this area: to start preparations for deployment of tankers filled with chlorine along the Bosanska Bijela-Brcko railroad and tankers with chlorine on the northern foothills of Mt. Majevica; to undertake preparations for the evacuation of

fighters and remaining inhabitants; and to be ready for the use of chlorine for their self-defene. In this way we want to protect the people of this region from the ruthless enemy.

We are aware that we are also endangering the rest of the inhabitants in the wider area of the Sava river basin, Slavonia [Croatia], Vojvodina, and parts of Hungary. We will inform the aggressor side that if it does not immediately stop its offensive against Gradacac and the liberated area in Tuzla region, we will be forced to start the implementation of our plan.

Because of constant disturbances and confiscation of our ammunition and other military equipment in the territory of so-called Herceg-Bosnia—Grude, Posusje, Kiseljak, Busovaca, etc.—we have been brought to a situation in which we can not give adequate resistance to the forthcoming enemy offensive. If the agreement reached with President Izetbegovic yesterday in Mostar is not urgently implemented and if we do not receive the equipment bought by the people of our region, we will be forced to use the last efficient weapon we possess.

The regional command of the Tuzla armed forces insists that the following political factors should be urgently informed about this: the presidency of the Republic of Bosnia-Hercegovina, Croatian President Franjo Tudjman, Croatian Defense Council commands from Grude to Vares, and international political factors—above all the UN Security Council and U.S. President George Bush. All of the mentioned institutions, political bodies, and individuals are invited, if they have a better and a more efficient solution for the salvation of the people of this area, to implement it urgently. This is said in a statement signed by Commander Zeljko Knez on behalf of the regional command of Tuzla headquarters.

Serbs Deny Using Poisonous Gases in Sarajevo LD0810120992 Belgrade TANJUG Domestic Service in Serbo-Croatian 1905 GMT 7 Oct 92

[Text] Sarajevo, 7 Oct (TANJUG)—The main headquarters of the army of the Serb Republic of Bosnia-Hercegovina this evening denied claims by Radio Bosnia-Hercegovina that Serb forces used poisonous gases in Sarajevo today.

The radio reported that Serb forces used "some poisonous gases" in battles in Novo Sarajevo, without specifying which gases were used.

The denial states that the Serb forces do not have poisonous gases and are not using them, and it characterizes the Radio Bosnia-Hercegovina report as media manipulation.

The main headquarters of the army of the Serb Republic at the same time states that the Muslim side today threatened to shoot 200 Serbian women and children if Serb units did not halt their advances. Sarajevo media have not mentioned this ultimatum today.

ARGENTINA

Japanese Ship's Passage Opposed With Chile

PY2210132992 Buenos Aires TELAM in Spanish 2335 GMT 21 Oct 92

[Text] Buenos Aires, 21 Oct (TELAM)—Argentina and Chile will "not accept the passage of the Japanese ship Akatsuki Maru with its 1.3 tons plutonium cargo through their territorial waters nor the use of their ports by the ship. [no closing quotation marks as received] The two countries likewise agreed to jointly present before the Japanese Government their "disagreement" over the ship's route.

After a long meeting at the Foreign Ministry building in Buenos Aires, Argentine Foreign Minister Guido Di Tella and his Chilean counterpart Enrique Silva Cimma said that "early next year the Congresses of the two countries will ratify" the border agreement in the continental glaciers zone "without necessarily modifying the bill."

During a news conference, the two ministers [words indistinct] a joint position in face of the possible transit through their territorial waters of the Japanese ship which is now in the port of Cherbourg in France and which will transport the plutonium cargo to Japan.

The document signed by the two ministers asserts the bilateral decision to prevent the transit of the ship through southern waters "to prevent, reduce, and control the contamination of maritime life," although it clarifies that "it does not have seek to interfere with the legitimate navigation rights" of Japan.

It adds that this measure will help "safeguard the health of the inhabitants and the natural patrimony of the two countries." For this reason Argentina and Chile "trust that this decision will not affect their excellent relations with the Japanese Government."

Minister Silva Cimma said that the joint decision made in Buenos Aires today will immediately be relayed to the governments of Uruguay, Brazil, Peru, Ecuador, and Colombia, who will be invited to support this joint position before the Japanese Government.

The Chilean foreign minister pointed out the need for a "more clear" international law "to rule on cases like the one created by the Japanese ship, in order to prevent risks."

Minister di Tella admitted that "there is an international law which we respect and cannot violate," adding that it also "contains gray areas which we will try to negotiate with Japan, seeking to modify the route of the ship transporting the plutonium cargo."

He said Argentina and Brazil will reiterate to the Japanese Government that they will not allow the Akatsuki Maru to navigate in their territorial waters or in the economic exclusive zone that extends 200 miles from the coast.

Minister di Tella also expressed Argentina's refusal to allow the ship to use the Drake Passage since it is dangerous for ships like the Akatsuki Maru. He added that no technical organization consulted could guarantee "zero risk" for the transit of the ship. During their meeting, the two foreign ministers also analyzed the status of the 2 August 1991 border agreement in the continental glaciers zone between the two countries which has still not been ratified by either Congress.

Regarding this subject, Di Tella said that the Argentine Government "would be very pleased if the agreement were approved during the first half of next year," and agreed with Silva Cimma that the delay in approving the bill in Congress "is normal but not worrisome."

Silva Cimma added that the delays "do not surprise or worry us," since in a democratic system "it is normal that legislators should take a long time to analyze such a delicate subject as territorial sovereignty."

Possible Tlatelolco Treaty Ratification Viewed

PY2210150792 Buenos Aires NOTICIAS ARGENTINAS in Spanish 1713 GMT 21 Oct 92

[Text] Buenos Aires, 21 Oct (NA)—The National Atomic Energy Commission (CNEA) today expressed its "full satisfaction" over the development of the process which may lead to the ratification of the Tlatelolco Treaty by the Argentine Congress.

In a communique, CNEA Chairman Manuel Mondino said: "This is the culmination of a process that began on 28 November 1990 with the joint Argentine-Brazilian declaration of Foz de Iguazu."

Mondino added: "CNEA officials are working intensely to overcome all technical barriers. We can now see with full satisfaction that even Hans Blix, the Director General of the International Atomic Energy Agency (IAEA), is praising this effort."

The Tlatelolco Treaty bans nuclear weapons in Latin America and the Caribbean. It was signed by Argentina in 1967 but never ratified. Congress is considering this situation and will decide whether to ratify it or not.

Mondino said: "CNEA activities have always revolved around the peaceful use of nuclear energy and the ratification of the treaty is the best way to consolidate that situation."

BRAZIL

CNEN Accused of Boycotting Accord With Cuba PY1910155492 Sao Paulo O ESTADO DE SAO PAULO in Portuguese 17 Oct 92 p 12

[Article by Tania Malheiros]

[Text] Rio de Janeiro—Fernando Peregrino, chairman of the State of Rio de Janeiro Foundation to Support Research (FAPERJ), yesterday accused National Nuclear Energy Commission (CNEN) Chairman Luiz Santana de Carvalho of trying to "boycott" the agreement signed by the foundation with Cuba and the Goias government for the victims of the radiation accident in Goiania to undergo tests in Cuba. The accident happened in 1987 when a cylinder containing cesium-137 was removed from the Radiotherapy Institute in Goiania.

The agreement was signed four months ago when Cuban President Fidel Castro visited Brazil for Rio-92. Cuba has experience in the subject after treating the victims of the Chernobyl nuclear accident in the former USSR in 1986. According to the FAPERJ chairman, the CNEN leadership was against sending the victims to Cuba last August until the last minute.

Peregrino said the CNEN chairman "did not allow the commission's physicians to participate in the talks before the agreement's signing." He added that the CNEN also was invited to participate in the agreement but that it did not even acknowledge the invitation. According to Peregrino, the survival of the agreement that will allow other victims to go to Cuba depends of the resources of the CNEN and the Health Ministry. The Cuban Government is willing to receive all the victims of the aforementioned accident, as long as expenses for their fares are covered.

The first group of victims suffers organic disorders not caused by radiation. The 17 people who may suffer problems caused by the radiation also suffer disorders that, in the first place, may have no relationship to the accident.

The CNEN issued an official communique stating that it never received an invitation to participate in the agreement with Cuba. The CNEN learned about the agreement 36 hours beforehand, when it was invited by the FAPERJ to "witness the signature of the agreement." The communique states that the physicians and experts of the Leide das Neves Foundation, "in their capacity as professionals and experts recognized at the international level, felt offended by the FAPERJ attitude."

CNEN Loses Control on Nuclear Enterprises

PY2210170092 Sao Paulo O ESTADO DE SAO PAULO in Portuguese 20 Oct 92 p 7

[Article by Tania Monteiro]

[Text] Brasilia—The official gazette on 19 October publishes a provisional measure (MP) in which the president of the Republic reorganizes the nuclear area. President Itamar Franco has determined that the National Nuclear Energy Commission (CNEN) will continue to be associated to the Strategic Affairs Secretariat (SAE) and will formulate the national nuclear energy policy, but will no longer control the enterprises that implement this program.

This change has caused concern among the scientific community which hints at conflicts within the planning and implementation of the nuclear program.

The MP states that nuclear enterprises will be separated from the CNEN and the SAE and will be controlled by the Mines and Energy Ministry, which, according to the decree, will also assume control over the oil and power energy industries. The SAE will loosen its control over enterprises like Nuclebras Heavy Equipment, Inc. (Nuclep), and Nuclear Industries of Brazil (INB) and its subsidiaries. The MP also determines that the SAE will transfer to the Mines and Energy Ministry the nuclear industries which control the mining and exploitation of the Pocos de Caldas region and the production of "yellow cake," a substance used for

enriching uranium. This change was suggested by dismissed President Fernando Collor de Mello in 1990 shortly after he assumed power.

Passage of Japanese Plutonium Shipment Opposed

PY2210231692 Rio de Janeiro O GLOBO in Portuguese 22 Oct 92 p 5

[Text] Brasilia—The Brazilian Government will not allow a Japanese vessel, carrying plutonium from the French port of Cherbourg to the Japanese port of Yokohama, to cruise Brazilian territorial waters. The Brazilian Government is closely monitoring this transport operation. In a note read yesterday by Press Secretary Lucio Neves, the Brazilian Government informed the Japanese Government that it is unsuitable for the ship to cruise Brazilian waters.

The note read by the press secretary says: "The government understands that its shores and territorial seas must not be exposed to risks."

The vessel will sail from France carrying 1.3 metric tons of plutonium, a highly dangerous substance with a useful life of 24,000 years. Chile and Uruguay already have banned the passage of the ship carrying radioactive cargo.

URUGUAY

Government Denies Entry to Plutonium-Laden Ship

PY1810190192 Buenos Aires NOTICIAS ARGENTINAS in Spanish 2359 GMT 17 Oct 92

[Text] Montevideo, 17 Oct (AFP-NA)—The Uruguayan Foreign Ministry officially announced today that the government has decided to adopt measures to prevent the Japanese ship Akatsuki Maru, which is carrying a plutonium shipment, from entering either Uruguayan jurisdictional waters or ports.

In a communique released this afternoon, the Uruguayan Foreign Ministry describes the plutonium shipment as being "highly dangerous to human health and to the environment."

The communique adds that the above decision was made "in light of reports indicating that the ship Akatsuki Maru, which is expected to carry a plutonium shipment, would take a route adjacent to Uruguay."

The communique says that "taking into account the logical and legitimate concern provoked by these reports" the Uruguayan Foreign Ministry has also contacted "officials of Argentina, Brazil, and Chile to coordinate actions designed to prevent the risks the passage of such a shipment could entail."

INDIA

Future Deployment of Privthi SS-250 Viewed BK1710100592 Delhi INDIAN EXPRESS in English 7 Oct 92 pp 1, 10

[By Pravin Sawhney]

[Text] NeW DELHI—Prithvi SS-250 medium range ballistic missile (MRBM), undergoing technical trials, will be given to the Air Force. Its integration into the service is unlikely before 1995, however, according to authoritative sources.

With an expected range of 250 km and warhead weighing 500 kg MRBM is likely to be employed for strategle targeting. The concept as being evolved by the Air Force is likely to utilise the missile more for disruption than destruction of strategic targets of both military and political significance. This implies that accurate target analysis permitting, the MRBM can be used for destruction.

A more probable utilisation would be a combined strike on strategic targets. While the MRBM would be aimed to disrupt the enemy air defence and communication systems, the heavy fixed wing strike aircraft can then undertake mission in a relatively less hostile environment, scaling lown own aircraft losses.

Much will depend upon the accuracy and the terminal effect of the missile system, however. The measure of the missile accuracy is the circular error probability (CEP) which is the area around the target where maximum missiles are expected to land. The Air Force expects a CEP of 20 mts [expansion unknown], which may be difficult to achieve, given a top professional assessment that the defence research and development laboratory (DRDL), responsible for Prithvi, is unlikely to get less than 100 mts CEP.

For the required missile terminal effect, the Air Force has shown preference for cluster-munition. This is also indicative that it is likely to be used more in the disruption role. It is pointed out that as a tactical nuclear warhead is not envisaged, a conventional warhead would require that each sub-munitions itself be optimised, however.

Only when these technical requirements of the service are met, will the missile costing over Rs? crore each, be cost-effective. For the present, only one technical trial of the MRBM, the eighth and recent launch of Prithvi, has been successfully conducted.

While the earlier seven launches of Prithvi SS-150 battlesupport missile to be given to the Army would have validated various developmental systems and sub-systems common to both missile versions, user trials of the semimobile missile are still a long way.

Meanwhile, the Air Force has already initiated work on the organisation required for the missile system. As the Air Force and Navy, unlike the Army, have organisations centered around the weapon systems rather than manpower, the induction of the MRBM would require additional committed combatant and non-combatant strengths and maintainence infrastructures, requiring government sanction.

This would be over and above the government ceiling of 45 squadrons mandated for the Air Force:

Although the Air Force is used to handling liquid propellent, as in SAM-2, it will require top command decision to whether accept Prithvi in pre-packed fuelled state or that liquid propellent be kept in containers. According to the DRDO [Defense Research Development Organization], the life of pre-packed propellent is five years, against 25 years for propellent given in containers. While the former is advantageous from the point of readiness, five years may be too less a period for life of the missile system.

Sources say a middle solution of working some percentage of both types of propellent using missiles is the most likely option.

With the induction of this strategic missile, the much propped role of the Air Force as a tactical force stands punctured. This missile would require strategic reconnaissance whether air or space based.

Kakrapar Nuclear Plant To Attain Criticality 92WP0008A Bombay THE TIMES OF INDIA in English 3 Sep 92 p 7

[Article: "Kakrapar N-Plant To Attain Criticality"]

[Text] Surat, September 2. The first phase of the 235-mw Kakrapar atomic power project (KAPP) is all set to attain criticality tomorrow. KAPP-I, an important part and parcel of the country's atomic programme is running almost two years behind schedule. The delay has resulted in cost overruns by nearly 300 per cent.

The chairman of the Atomic Energy Commission, the managing director of the Nuclear Power Corporation [NPC] and other top brass are expected to be present at Kakrapar tomorrow.

The Central government had given the final clearance to the KAPP in July 1981. After the necessary acquisition of land of 8,900 hectares from about 300 farmers of the area, the project was formally launched in 1983 under the auspices of the NPC. The total cost of the project was pegged at Rs [Rupees] 384 crores but the revised estimated cost has now escalated to Rs 1056 crores. Normal functioning was reported when the project authorities conducted the "hot conditioned test" at the plant between January 14 and 21.

The trial runs at the plant were expected to commence from August 1991. However, a major mishap at the plant in early September further delayed the commissioning. The plant had suffered a loss of Rs 10 crores when the transformer, wires and indicator panels were reduced to ashes.

According to Mr T. B. Vyas, chief project engineer, the delay in the commissioning of the plant was due to overhaul in the basic designs of the civil works after a commissioned seismic study rendered the plant design as unsuitable. As per the earlier proposal, a prototype of the Narora atomic power plant was to be constructed.

The total power generating capacity of KAPP is 470 mw. Natural uranium will be used as fuel. KAPP will supply power to the Gujarat electricity board at the rate of Rs 1.50

per unit. The Gujarat electricity board has constructed the transmission lines—two each to Vav, Bharuch and Vapi—under the direct control of the National Power Transmission Corporation (NPTC). While the Bharuch and Vapi lines have been completed, work is yet to be started on the Vav lines in the second phase.

Meanwhile, even as KAPP-I will go on stream tomorrow, the Anu Mukti Manch and the Sampurna Kranti Vidyalaya have pointed out that the Kakrapar project based on the Candu nuclear reactors of Canada was inherently unsafe. The three Candu stations in Pickering, Bruce and Darlington were reviewed by a greenpeace team and the studies reveal that a major risk of a serious accident loomed large.

The report published by the Greenpeace team under the title "Canadian nuclear reactors inherently unsafe" has categorically stated that the reactors were prone to accidents for two reasons. First, in the fundamental design features of the Candu system and secondly the consistent history of the failure of critical equipment. The report has summed up that the reactors were operating dangerously close to the outer margins of safety, putting the public at risk.

One of the other important findings of the Greenpeace is that the basic design flaw which results in runaway fission reactions with parts of nuclear core going out of control is similar to that of the Soviet reactor which exploded at Chernobyl in 1986. The report has finally recommended the total phasing out of the power stations.

Moreover, the KAPP is also plagued with labour problems. The labour union affiliated to INTUC [expansion not given] resorted to agitations on a couple of times and has also threatened to boycott the inaugural function on the issue of non-release of construction incentive payment.

Need for Indigenous Nuclear Technology Stressed 92WP0006A Bombay THE TIMES OF INDIA in English 15 Sep 92 p 5

[Article: "Indigenous N-Power Technology Stressed"]

[Text] Bombay, Sept. 14. The director of the Bhabha Atomic Research Centre (BARC), Dr R. Chidambaram, said here today that India faces restrictive technology regimes which are growing in influence.

The BARC chief was delivering the keynote address at a seminar on India's nuclear power programme with pressurised heavy water reactors.

Dr Chidambaram fears that even conventional items, considered "hi-tech," are likely to come under restrictions if they are used in nuclear plants. "The only solution then is to launch a vigorous technology development drive and develop the required equipment within the country," he said.

He said with the capability that exists such tasks could be handled with confidence and determination. "After all, if we depend on imports there will always be a technology gap between the best that is available abroad and the best that is available to us in all hi-tech areas," he said.

According to him, such an approach will prove handy when deploying fast reactors and thorium reactors.

Dr Chidambaram said with the present international scenario, it is unlikely that India will have much choice but to carry forward these programmes on its own.

Most of the developed countries are not likely to have much thrust in the area of fast reactors and practically no interest in thorium since for them uranium is likely to be available in plenty and also cheaply for quite some time, he said.

Hitting out at the media, he regretted that there are people outside the country and a small number within who are keen on discrediting the atomic energy establishment. "They do not hesitate to confuse things and present a distorted picture. Sensitivity of the public on nuclear issues comes in very handy for such people. The right way to deal with such threats is to demonstrate success beyond doubt with our plants."

The chairman of the atomic energy commission (AEC), Dr P. K. Iyengar. said India was among those developing countries which has the necessary infrastructure for nuclear power projects. He regretted that the media presents an matrue picture of the country's atomic energy programme, adding that he is not entirely surprised that the foreign media tends to distort facts. "But, when it appears in newspapers in the country, it is regrettable," he said.

The AEC chief said Dhruva reactor had several safety aspects with built-in redundancies.

Nuclear Cooperation To Continue With France BK2310030692 Delhi All India Radio Network in English 0245 GMT 23 Oct 92

[Text] The French minister for Research and Space, Professor Hubert Curien, has said India-French cooperation in the nuclear field will continue. In an interview to PTI in Madras yesterday, Professor Curien said there are some international rules covering military use like the Nuclear Nonproliferation Treaty, which we have to respect. He said, it will not prevent his country's cooperation with India, however.

IRAN

'Dual Attitude' of IAEA Laws Criticized

LD2110132392 Tehran IRNA in English 1019 GMT
21 Oct 92

[Text] Tehran, Oct. 21, IRNA—The 'TEHRAN TIMES' here Wednesday cricized the International Atomic Energy Agency's (IAEA) dual attitute towards the world countries access to nuclear power and weapons.

The paper referred to the last week's decision of the IAEA in blocking an Arab-backed provision criticizing Israel and said no one is now doubtful about "Israel's nuclear capabilities and the country's efforts to proliferate its atomic weapons program."

"While Muslim countries have been continually denied access to nuclear energy, even for peaceful purposes, Israel faces no limitations in trying to procure and develop atomic weapons."

It pointed to Iran as an example of the countries which intended to use nuclear energy within a "peaceful framework"

Elsewhere, the paper referred to the IAEA support of Israel on one hand and Iraq's censuring for concealing 175 nuclear weapons program, on the other.

It termed as "laudable" the move against Iraq, given Saddam's threat to world peace, but said it was unfortunate that such punishments are extended only to the weak countries, and not to those violators who enjoy the backing of great powers.

The paper concluded by saying "if there is to be a resolution in the IAEA on nuclear safety and control in the Middle East, it is expected for the law to be fairly applied to all the member sates, even Israel."

IRAQ

Paper Calls for Nuclear-Free Zone in Region JN1710143592 Baghdad INA in English 1325 GMT 17 Oct 92

[Text] Baghdad, Oct 17, INA—AL-QADISIYAH daily for today said that the national security of any Arab country was part and parcel of the pan-Arab security.

In a study published today, the daily said that the state of division and weakness in the Arab homeland left the door wide open for the fiercest internal and external challenges to undermine the pillars of the Arab national security.

The daily added that confronting the foreign challenges required an over-all national strategy ensuring the interaction of the basic military, economic and social strategies.

The paper prompted the Arabs to consider possible options to encounter the military challenges facing the Arab nation, including, the Zionist strategic military challenge, particularly, its nuclear superiority, the matter that could only be achieved through possessing parallel means of deterrence.

AL-QADISIYAH also called for establishing a nuclear arms-free zone in the region, without any bias to the Zionist entity.

PAKISTAN

Iranian Envoy Denies Defense Plan With Islamabad

BK1410115692 Islamabad THE MUSLIM in English 13 Oct 92 p 5

[Text] Multan, Oct 12: There is no proposal under consideration by the Iranian government to have cooperation with Pakistan in defence and nuclear sector. This was stated here by Agha Mohammad Javad Mansuri, Iranian Ambassador to Pakistan, while talking to newsmen here Friday before leaving for Islamabad. He was here on a brief visit.

Mr Mansuri said that the two countries were cooperating in the fields of communication, transport, industries and agriculture, however. It is a mutual arrangement, he said.

The Iranian Ambassador said that the rumours of Pakistan and Iran jointly working for the development of nuclear technology or for having a joint defence syster, were being deliberately spread by European coudntries to achieve some particular designs.

Agha Mohammad Javad Mansuri said that after the collapse of communism, the capitalist world was hell-bent on weakening the Muslim World. The New World Order is aimed against Muslim countries, he added.

The Iranian envoy also denied that Iranian president Hashimi-Rafsajani had visited Pakistan and Arab countries as a mediator. He also emphatically debunked the reports; that Iran was interfering in the internal affairs of Afghanistan. He said all Iran wanted was a government enjoying popular support of the people of Afghanistan, a government comprising talented, educated and sincere leaders who could bring peace to the war-ravaged country. He demanded that no outside power should interfere in the internal affairs of Afghanistan, otherwise normalcy would never return to the unfortunate land of Muslim brothers.

Mr Mansuri said in reply to a question that his government was willing to return all the Iraqi planes and in this connection Iraq had contacted the United Nations. He said it was absolutely incorrect that Iran was supplying arms to an ethnic group in Pakistan. He said that arms were being smuggled to Pakistan from Iran and the Iranian government had launched an operation against the smugglers, however. More than 100 army men have died in the operation.

The Iranian envoy said that his country's ties with Turkey had been restored and the Turkish Prime Minister would visit Iran in the near future.

Official To Seek French Help in Nuclear Field BK1910053992 Islamabad THE NEWS in English 18 Oct 92 p 12

[By Mariana Baabar]

[Text] Islamabad: Secretary General, of the Foreign Affairs, Akram Zaki leaves for Paris on Sunday on a two day visit in response to an invitation by his French counterpart.

Before leaving, Zaki would also be holding an important meeting with Prime Minister Nawaz Sharif, who had himself visited France in February this year.

While in Paris, Zaki would be initiating dialogue on a draft agreement on peaceful cooperation in the nuclear field.

When asked for comments, Zaki said: "This draft was initiated last year and a commitment was made by the Prime Misnister during his visit to France. This agreement will be signed shortly."

The sailent features of the proposed agreement would be different from the one Pakistan and France signed in 70's for cooperation in the nuclear field.

The United States believed that Pakistan was seeking the French assistance for the purpose of building a so-called Islamic Bomb which created serious problems for the Bhutto government.

This time around the agreement, while focussing entirely on peaceful purposes would include a framework of visits by scientists to each others' nuclear institutes, training of scientists, cooperation in the medical and agriculture fields besides other issues. "We believe that during bilateral consultations we would strive for harmony through political dialogue, Zaki added." [end quote as received]

According to observers watching Europe and its future relations with Pakistan, stress is on the factor that Pakistan should take advantage of France's Gallins traditions.

One sentor official at the Foreign office said "we have to build on the non-conformist positions articulated in Paris and have our own relations while steering around through political management and commercial instinct."

Observers maintain that for Pakistan, on the eve of the 21st century, such an approach was essential because France is expanding towards the Middle East and the Muslim world.

When questioned the Foreign office was not ready to elaborate on whether Zaki's visit would take up Pakistan's interests in the defence field where an agreement in principle had already been reached with the French government on the sale of Mirage 2000 and submarines.

One official conceded that the defence establishment of Pakistan was showing disinterest regarding the purchase of Mirages, however.

"France," he disclosed; "has provided us with political and security alternatives, but we have to appreciate the constraints of our military in which finance has played a bigger role than technology. You are not at a dead end after the US stopped F-16 sales." Before Zaki leaves for a two week stay in the US, he would also be meeting with French parliamentarians, intellectuals and senior members of the French media. [Islamabad Radio Pakistan Network in Urdu at 0200 GMT on 19 October adds: "A high-level dialogue between Pakistan and France is opening in Paris today. Akram Zaki, secretary general for foreign affaris, will represent Pakistan at the dialogue. Talking to newsmen before leaving Islamabad yesterday, he said the dialogue will specially cover the situation in occupied Kashmir, Pakistan's policy on nuclear nonproliferation, declaring South Asia a nuclear free zone and Pakistan's economic development program."]

Nuclear Energy Accord Expected With France BK2110154692 Islamabad Radio Pakistan Network in Urdu 1500 GMT 21 Oct 92

[Text] France and Pakistan are willing to sign the nuclear energy agreement for nonmilitary purposes. This was stated by Akram Zaki, the secretary general of foreign affairs, who is now visiting France. He exchanged views with French leaders on Pakistan's proposal for declaring South Asian region as a nuclear-weapon-free zone.

SYRIA

Nuclear Reactor Plan Abandoned on Technical Grounds

PM2210082492 London AL-HAYAH in Arabic 21 Oct 92 pp 1, 4

[Report by 'Abdallah al-Dardari: "Syria Abandons Idea of Setting Up Nuclear Reactor"]

[Excerpt] Damascus—Syrian economic sources yesterday told AL-HAYAH that Damascus has for the time being abandoned the idea of setting up a small nuclear reactor to generate electricity, for technical and economic reasons.

The sources pointed out that the technical studies conducted revealed that any nuclear reactor requires a huge quantity of water to cool its core, exceeding the present flow level of the Euphrates, the largest waterway in Syria, especially before a final agreement is reached with Iraq and Turkey on a clear water quota.

They also pointed out that any reduction in the quantities of water for the cooling process could lead to a dangerous rise in the temperature inside the reactor, thus threatening catastrophic reactions.

They indicated that economic studies proved that Syria has an alternative to liquid and nuclear fuel which is cheap, safe, and environmentally clean, namely natural gas, of which it has a confirmed reserve of more than 650 million cubic meters. It is currently implementing a huge project for generating electricity from gas from the Jandar stations near Hamah with an 800-megawatt capacity and from the Tishrin Dam station with a 630-megawatt capacity at the peak of the water flow, in addition to a special station designed to supply the iron and steel plant intended to be set up near Hamah, with a 330-megawatt capacity. Work on the Widyan al-Rabi' station near Damascus-which was supposed to be completed before the end of 1992 and whose implementation was delayed because of the changes in the former Soviet Union, which took care of the project-will resume shortly following an agreement with the former Soviet republics on the new multilateral cooperation method.

The sources also say that these power stations, which will all operate on natural gas, in addition to the transformation program being carried out by the Syrian Government to switch the country's major industries from operating on liquid fuel to natural gas, eliminate any need—at least in the foreseeable stage—to head for nuclear energy, which will remain a long-term Syrian option which also relies on building the human base that can deal with nuclear technology in complete confidence. [passage omitted]

CIS Isotope Thefts Cause Concern in Germany

LD1910133192 Moscow Russian Television Network in Russian 1700 GMT 13 Oct 92

[Video report by V. Mostovoy and Ye. Zhitkov, from the "Vesti" program, from Germany; figures in brackets denote broadcast time in GMT in hours, minutes, and seconds]

[Text] [171349] [Mostovoy over video of police with gas masks] A few days ago the Hessen Land criminal investigation police discovered in Frankfurt am Main two contraband containers of radioactive materials. According to experts, both the containers, bearing labels in Russian and containing cesium-137 and strontium-90, had been misappropriated from either scientific or medical establishments in the former USSR, most probably Russia or Lithuania.

The aforementioned materials are unsuitable for making atom bombs but could be extremely dangerous in terrorists' hands.

The police also have information that, in addition to the discovered materials, at least 10 kg of uranium and other radioactive materials have been imported into Germany from the CIS. There whereabouts of these have not yet been established. All these details, and especially the absence of a single, centralized body controlling the storage and production of radioactive materials on the territory of the former USSR, are causing extreme concern among the German public.

[Mostovoy to camera] What is needed are urgent, concerted measures on the part of the competent authorities in both countries to stop the smuggling of radioactive materials. [171445] [video shows police with gas masks, container with Russian inscription, left luggage compartments being investigated, police station scenes]

CIS Nuclear 'Brain Drain' Worries BND

PM2110133592 Moscow IZVESTIYA in Russian 20 Oct 92 Morning Edition p 7

[Report by Yevgeniy Bovkun: "Nuclear Scientists Leaving CIS"]

[Text] Bonn—The German Federal Intelligence Service (BND) has sent Chancellor H. Kohl the preliminary results of its investigation into the "leaking" of specialists in the sphere of nuclear technology from the CIS.

According to the BND's data, approximately 3,000 nuclear scientists in the CIS, primarily in Russia, have mastered the technology for producing weapons, and approximately 5,000 scientists and engineers can participate in the production of fissionable materials—uranium, plutonium, or tritium.

Contrary to the assertions of the leadership of Russia and other CIS states that there is no "nuclear outflow," the BND file contains information on many instances of the "recruitment" of Eastern—above all, Russian—experts by third countries.

The document reports, for example, that several Commonwealth scientists have signed contracts with Algeria. Four have themselves offered their services to India. Some 50

specialists remain in Iraq, including employees of the Arzamas-16 Russian research center and a missileman from Ukraine. Since the end of 1991 14 nuclear scientists have been in Iran, and 50 engineers and 200 technicians from the CIS have concluded new labor agreements with Tehran. Libya has made an official offer of cooperation to two specialists from Russia, but many Russians are participating in unofficial nuclear projects there. Finally, of the 7,000 scientists who have emigrated to Israel since 1989, 40 have been nuclear specialists.

For the purpose of preventing a "nuclear outflow," in February this year the United States, the FRG, and Russia agreed to set up a scientific and technical center which would tackle "cadre problems" in the sphere of nuclear production. The EC promised financial assistance for the project, but, to all appearances, construction of this center is being held up by the "Common Market"—which increases the chances of the "Third World" getting top-class nuclear scientists from the CIS in its laboratories.

Pacific Fleet Missile Test Firing Successful

LD2210101292 Moscow ITAR-TASS World Service in Russian 0942 GMT 22 Oct 92

[By ITAR-TASS correspondent Sergey Ostanin]

[Text] Moscow, 22 Oct—A nuclear submarine of the Pacific Fleet has successfully fired a ballistic missile from its position in the Pacific Ocean onto a designated test range in an area of northern Siberia.

Preliminary information from operational monitoring shows a highly accurate strike. In accordance with the agreement between the USSR and United States "On measures to reduce the danger of nuclear war between the USSR and the United States," the U.S. side was informed in good time of this firing. This was reported today to an ITARTASS correspondent at the press service of Russia's Navy.

Russia, U.S. Sign Uranium 'Antidumping' Accord PM2110155992 Moscow IZVESTIYA in Russian 21 Oct 92 Morning Edition p 4

[Report by Aleksey Portanskiy: "Russia Asserts Its Right To Freely Sell Uranium On World Market"]

[Text] Last Friday an agreement was signed in Washington between the U.S. Department of Commerce and the Russian Federation Ministry of Atomic Energy on the suspension of the antidumping inquiry concerning supplies of uranium output from Russia. At the same time, the United States signed agreements on the sale of uranium ore with Kazakhstan, Ukraine, Kyrgyzstan, Tajikistan, and Uzbekistan.

Uranium sales on the world market are one of the most lucrative export items both for the former USSR and indeed for Russia in its present form. Russia's export potential in this sphere is significantly greater than the negligible quota of nuclear fuel it has today on the world market. The main obstacle is presented by the clearly discriminatory conditions for trade in Russian uranium on the U.S. market, which take the form of unjustified duties and depressed

quotas. In addition to these restrictions, our uranium producers were accused of price dumping by the West. An antidumping inquiry was instituted against them in the United States, as a result of which Russia lost something in the region of \$200 million. Now, as we can see from the signed agreement, this inquiry is being stopped.

"The signed agreement was reached with great difficulty," V.N. Mikhaylov, Russian Federation minister of atomic energy, stated in an interview with IZVESTIYA. "The point is that the Americans' initial intention was that their Department of Commerce should significantly reduce our presence on the market on the American continent for the sake of the interests of their own uranium producers, whose technology, incidentally, is significantly lower than world standards. That is why the final document restricts Russia's opportunities on the U.S. market altogether. Our quotas are decreasing, although admittedly duties are being abolished. The thrust of the agreement is as follows: Duties are disappearing, but the restrictive quotas remain. The latter are connected with the price, and this is very important.

"Today a pound of natural uranium concentrate costs around \$9 on the U.S. market. The minimum price at which our quota starts operating is \$13 per pound. As the price goes up, the quota increases significantly, however: For example, if the price is \$20 per pound, the quota is 6,000 tonnes a year, that is, six times more than it is at present. Since the price of nuclear ore will rise in the long term, the agreement provides hopes of a growth in our income in the future.

"The Americans are undoubtedly restricting us in uranium ore trade, and this is contradictory to the sense of a free market."

As the minister stressed, the U.S. Administration wants to control the entire export of uranium from Russia. Therefore, during the signing of the agreement, the Russian side put forward a number of conditions to protect its own interests. First of all, the Russian Federation Ministry of Atomic Energy will not provide the U.S. Department of Commerce with complete information on its entire uranium exports, which the Americans are demanding in the agreement, that is, it will not agree to full verification in Russia of all documents concerning the export of uranium to countries other than the United States. Second, the uranium enriched in Russia for other countries (not Russian ore) and the uranium exported to the United States as pledged material [zalogovoy material] should be outside the framework of the agreement. Furthermore, the market price for each period should only be announced by the U.S. Department of Commerce following coordination with the Russian Ministry of Atomic Energy.

The American side has been informed that if these conditions are not agreed by 2 December, the signed agreement will not enter into force.

The United States sometimes decides to grant us credits, the Russian minister noted in conclusion, but, at the same time, restricts our opportunities for earning money through our own labor and our own technology. It is hard to agree to

such a state of affairs because trade cooperation between countries is more important than credits.

Russian Uranium To Be Sold on U.S. Market LD2010124192 Moscow Russian Television Network in Russian 1100 GMT 20 Oct 92

[From the "Vesti" newscast]

[Text] Russia, Ukraine, Kazakhstan, Kyrgy zstan, Uzbekistan, and Tajikistan have signed an agreement with the United States on the sale of uranium on he U.S. market. Under the agreement, each republic is to receive a uranium quota that it can sell in the United States.

Russia, U.S. Research Guided Plasmoid Defense PM2010143392 Moscow Teleradiokompaniya Ostankino Television First Program Network in Russian 0800 GMT 10 Oct 92

[Video report by Aleksandr Galkin, from the "Aerospace Salon" program; figures in brackets denote broadcast time in GMT in hours, minutes, and seconds]

[Excerpts] [080726] [Galkin over video of computer graphics of ABM defenses] The 1972 ABM Treaty made provision for the creation of a protective umbrella over only one area in the USSR and one area in the United States, either above the capital or a strategic missile basing area. Our leaders naturally gave preference to protecting Moscow, that is protecting themselves. The Americans began to build an ABM defense system around their "avenging sword," as they called it. But scientists, both in our country and in America, went further. They experimented with laser, neutron beams, and microwave radiation generators capable of enveloping any object flying through the atmosphere in a plasma cocoon. [080809] [video shows Moscow ABM defenses and computer graphics illustrating aforementioned experiments] [passage omitted]

[081111] [Galkin] At the "Vympel" Corporation's laboratories certain specifics of the behavior of guided plasmoids have already been researched. It is too early to claim that absolute certainty has been attained. But it is possible to say with confidence that in the longer term it will be possible to create virtually impenetrable plasma zones in the path of missiles and aircraft of a potential aggressor.

[Academician R.F. Abramenko] If you have an instrument such as a guided plasmoid at your disposal, the dynamics of the flight of any object flying through the atmosphere are in the hands of the person who controls the environment in the flight path of the said aircraft or missile, rather than its pilot. This environment is controlled by you, here on the ground.

[Galkin] That is to say, it is possible to deflect a missile from its target, or to change the flight path of an aircraft so that it runs vertically to the original course, in which case the aircraft will be destroyed by the force of inertia.

However, it has to be honestly admitted that our scientists and designers from the "Vympel" Corporation have not progressed beyond experiments. It was necessary to abide by the ABM Treaty. But now, when we have stopped being enemies, it has been decided to carry out practical tests together with the Americans. An agreement to this effect has recently been reached. The project has been dubbed "Doveriye" [trust], and the sides are now looking for money to fund the project. This is all the more important since, apart from providing protection against nuclear attacks, guided plasmoids are capable of repairing ozone holes, reducing civilian aircraft fuel consumption, removing space garbage from near-Earth orbits, and much else besides. [O81257] [video shows Moscow ABM defenses, laboratory tests, a warship, and computer graphics illustrating various experiments]

Russia To Extend Moratorium on Nuclear Tests

Yeltsin Decree Published

PM2110113192 Moscow ROSSIYSKAYA GAZETA in Russian 21 Oct 92 First Edition p 1

[Decree No. 1267 of the Russian Federation President "On a Moratorium on Nuclear Tests," dance ! foscow, The Kremlin, 19 October 1992, and signed by Russian Federation President B. Yeltsin]

[Text] Proceeding from the Russian Federation's desire for a complete ban on nuclear tests by all states, and in the light of the suspension of nuclear tests by France and the United States, which creates favorable conditions for meeting the challenge of their full prohibition, I resolve:

- 1. To extend until 1 July 1993 the period of validity of the moratorium on nuclear tests by the Russian Federation declared by the 26 October 1991 Directive No. 67-rp of the Russian Federation President "On Halting Nuclear Weapons' Tests on the Novaya Zemlya Proving Ground."
- To submit proposals on the expediency of further extending the moratorium and on holding relevant talks to the Russian Federation Government by 1 July 1993.

[Signed] Russian Federation President B. Yeltsin Moscow, The Kremlin, 19 October 1992, No. 1267.

Addresses Supreme Soviet

PM1910180192 Moscow ROSSIYSKAYA GAZETA in Russian 20 Oct 92 First Edition p 1

["Address to the Russian People and Supreme Soviet"— ROSSIYSKAYA GAZETA headline]

[Text] Esteemed citizens of the Russian Federation,

Esteemed People's Deputies,

In connection with numerous appeals from Russian citizens, a number of international and national organizations, and individuals in various countries, and given that my announcement last October of a moratorium on Russian nuclear tests was followed by decisions to halt such tests from France and recently the United States too, I have signed a decree extending our moratorium to 1 July 1993. In the event of the other nuclear powers following the example set by Russia, France, and the United States, a real opportunity will open up for realizing mankind's longstanding dream of a total ban for all time on nuclear tests, which have already done such considerable damage to our environment.

A great role in creating a favorable political climate for the resolution of this important issue has been played by Russian people's deputies, whose statement adopted at the Sixth Congress was not only heeded but is being implemented.

I call on the leaders of Britain and China to respond positively to the ending of nuclear tests by three nuclear powers and to declare moratoriums on their own tests as soon as possible.

It is the duty of all governments to step up efforts to ensure the speediest conclusion of an international treaty on the complete prohibition of nuclear testing. As for Russia, I reaffirm our unswerving readiness to get around the negotiating table with a view to elaborating such an international treaty as quickly as possible.

[Signed] B. Yeltsin

Ukraine President Welcomes Decree

LD2010122792 Moscow ITAR-TASS in English 1142 GMT 20 Oct 92

[By UKRAINFORM-TASS]

[Text] Kiev October 20 TASS—The recent decision by France and the United States to suspend the tests of nuclear weapons and the extension of the moratorium on nuclear tests by Russia have been welcomed in Ukraine which has always consistently come out in favour of complete termination of all nuclear tests, says a statement issued today by President Leonid Kravchuk.

Such actions are of particular importance to Ukraine, the people of which have experienced a radioactive contamination owing to the Chernobyl disaster, Kravchuk pointed out.

The president of Ukraine expessed hope that other states will also follow suit, which will create an atmosphere of trust and appropriate prerequisites for mankind's irreversible march towards reduction and final elimination of nuclear weapons.

UN Spokesman Explains Decree to UN

LD2110110292 Moscow ITAR-TASS World Service in Russian 2330 GMT 20 Oct 92

[By ITAR-TASS correspondent Yevgeniy Menkes]

[Text] UN, 20 Oct—The attention of those taking part in the discussions in the special political committee of the 47th session of the UN General Assembly has been drawn to Russian President Boris Yeltsin's decree on extending the moratorium on nuclear tests.

Russia has announced its readiness to proceed decisively by making substantial restrictions on nuclear tests, going so far as to stop them completely, Russian Federation representative Boris Krasulin declared in the discussion on Tuesday. Russia wants an appropriate international agreement to be drawn up, and the work of the disarmament conference to be stepped up to this end. This position is specifically stated in the one-year moratorium declared in October 1991 and extended by the Russian president's decree until 1 July 1993.

Russia is pleased with France's decision to halt its own nuclear tests until the end of 1992, the Russian Federation's delegate said. He recalled that in April of this year the Russian Federation Supreme Soviet called upon other nuclear states to follow the example of Russia and France and to halt their own nuclear tests.

We welcome the United States' recent decisions on nuclear tests, which show that there are constructive changes in approaches to the problem at issue. In the favorable situation currently emerging, it is important to give fresh impetus to the drive to ban nuclear tests and to step up efforts to seek mutually acceptable and effective practical solutions to the problems existing in this sphere, the Russian representative commented.

Effort Toward Complete Ban

PM2110132592 Moscow KRASNAYA ZVEZDA in Russian 21 Oct 92 p 3

[Article by Aleksandr Golts: "There Will Be Silence in Nevada and Novaya Zemlya. But Chief Decision Still Lies Airead"]

[Text] It is any museum's ideal to assemble the most complete collection. It seems that the museum of our nuclear weapons, which has just opened in Arzamas-16, is already close to this ideal. For the Russian president's decree extending through 1 July 1993 the moratorium on all nuclear tests makes the possibility of new acquisitions by this museum very problematic. It is perfectly obvious that the suspension of nuclear tests very seriously limits the possibility of creating new arms.

I believe that this was not an easy decision for Boris Yeltsin. On the one hand, the Russian public and the world public are continuing to sound the alarm about the damage to the environment. In addition, the continuation of nuclear tests would call in question Russia's adherence to nuclear disarmament. It would be an obvious contradiction if we were to reduce nuclear arsenals on an unprecedented scale and, at the same time, continue improving these arms. Many analysts have pointed out that the continuation of tests essentially prompts what are still nonnuclear states to create lethal weapons.

It was also clear that the moratorium announced by Boris Yeltsin in 1991 could no longer be ignored by other nuclear powers. The world has really begun to change. Let us ponder: A few years ago France organized a diversion in order to be able to continue nuclear explosions. But now President Mitterrand is suspending all the 1992 nuclear programs.

But, on the other hand, it was impossible not to notice that until very recently nuclear explosions were continuing to thunder out in Nevada (I will remark that this year's U.S. test program has already been fulfilled). The administration held out to the last, as the saying goes, rejecting all attempts by U.S. legislators to urge the White House to join the moratorium. Its spokesmen repeatedly declared: The United States needs to conduct nuclear explosions to check "the safety, reliability, and effectiveness of its weapons." At the same time, it was emphasized that, as long as the United

States possesses such weapons, President Bush will veto Congressional bills banning tests. The administration demonstrated its determination to act in just this way by exploding a nuclear device even after the Senate had adopted a resolution calling for a nine-month moratorium.

But, for a number of domestic reasons, the White House could not continue obstructing. On 2 October G. Bush signed a bill imposing a moratorium on nuclear tests through 1 July 1993. At the same time, there was the very significant reservation that he considers such an approach incorrect and will seek in the future to conduct "the minimum number of nuclear tests."

So it would be premature to say that the ending of nuclear tests is easily attainable. During the nine months of silence in Nevada and Novaya Zemlya London and Beijing can ponder whether it is worth joining the moratorium. A time of elaborating principled decisions has arrived in Moscow and Washington. Everything must be weighed. Most importantly, a clear and unambiguous answer must be found: Is it possible to maintain the safety of the weapons that already exist without tests? But, one thing is already obvious today—only all together is it possible to proceed toward a complete ban on nuclear tests. Russia, the United States, and France have taken the first steps.

Russia May Resume Tests If U.S. Resumes

LD2010225492 Moscow Russian Television Network in Russian 2000 GMT 20 Oct 92

[Report by correspondent Ye. Revelskaya; from the "Vesti" program]

[Text] Atomic Energy Minister Viktor Mikhaylov told "Vesti" today that hearings will be held in parliament before the end of the year on the state of nuclear tests in the country, in order to establish the minimum number necessary. The last nuclear explosion on Novaya Zemlya was conducted by Russia on 24 October 1990. Since then, the United States has conducted 20 nuclear explosions, France 10, and China four. The Atomic Energy Ministry is preparing two or three nuclear tests for the second half of 1993, in case the United States resumes its tests after July 1993.

Russia, U.S. Seminar on Worry Over Nuclear Safety

MK2110143192 Moscow KOMMERSANT-DAILY in Russian 21 Oct 92 p 10

["International Department" report: "Weapons Nonproliferation Seminar. Experts Believe That Former USSR Is Very Dangerous. Because It Is Armed"]

[Text] Yesterday at the Russian-U.S. Information Press Center a seminar entitled "Nuclear Safety in the Former Soviet Union," organized with the assistance of the Monterey International Research Institute and the Washington Council for Nonproliferation completed its work. The U.S. delegation arrived in Moscow after visits to Minsk and Kiev, and it will subsequently leave for Alma-Ata. The seminar is being sponsored by the Winston Foundation, the Carnegie Corporation, and the MacArthur Foundation.

William Porter, director of the Monterey Institute's Center for Russian and Eurasian Studies, acknowledged that the previous stage of the seminar in Kiev provoked no interest either in the press or the government. Yet Ukraine's special position on the issue of nuclear weapons concerned the seminar participants, and experts in the corridors even shared with your KOMMERSANT-DAILY correspondent their opinion that the timetable for withdrawing nuclear weapons from Belarusia: territory increased from three to seven years under the influence of neighboring Ukraine.

Valeriy Davydov, former adviser to the USSR delegation at the Conference on the Nonproliferation of Nuclear V/eapons, noted the particular danger of nuclear technologies penetrating military conflict zones, specifically the Transcaucasus. According to him, Armenia's plan to start up two reactors at the Armenian nuclear electric power station (they were shut down for safety reasons in 1988) could have unpredictable consequences.

Observers noting that the spread of military technologies from the territory of the former USSR is being increasingly discussed in the West, which is extremely worried by the absence of adequate regulation in the CIS both of the regime for the nonproliferation of nuclear technologies and of the export controls system in general.

Russia Notes PRC Denial of Reported Arms Purchase

LD2210132792 Moscow ITAR-TASS World Service in Russian 1225 GMT 22 Oct 92

[By ITAR-TASS correspondents Grigoriy Arslanov and Vladimir Fedoruk]

[Excerpt] Beijing, 22 Oct—"Russia is not making any deliveries of nuclear equipment, missiles, or other types of weapons to China. Nothing of this kind has happened or is happening. For its part, the Russian side has also rejected these rumors." PRC Foreign Ministry spokesman Wu Jianmin said this at a briefing for Chinese and foreign journalists held here today. [passage omitted]

Russia's Grachev on Status of Missile Forces

LD2010195192 Moscow ROSSIYSKAYA GAZETA in Russian 21 Oct 92 First Edition p 2

[Report by Vladimir Zelentsov on an interview with Russian Federation Defense Minister Pavel Grachev; place and date not given: "I Do Not Believe That Nuclear Strikes Are Possible"]

[Excerpt] With regard to the stylish office where the journalists were invited, Army General Pavel Grachev, Russian defense minister, said: "Do not imagine that I chose it. I inherited it." Fair enough, if that were all.

[Grachev] Before traveling to Novaya Zemlya recently, I measured the background radiation in my office. It was equivalent to 22 milliroentgens per hour. Yet on Novaya Zemlya—where the last nuclear test took place before the moratorium came into force—background radiation was four milliroentgens.

Apart from the test range (which is in working condition), there are other subunits on 14ovaya Zemlya too—specifically, troops of the Air Defense Forces. The decision has been made for them to be significantly reduced. Several radar companies, two air defense missile regiment battalions, and one or two fighter regiment squadrons will be transferred to the mainland.

As for the strategic missile troops, those of them on Russian territory will be partially stood down, while others will remain on combat alert-but the missiles will have no specific targets. Yes, the bearings [napravleniya] have been issued, but the targets have not been defined. Missiles in Belarus, Kazakhstan, and Ukraine have been stood down and withdrawn to the reserve. They could be used with their presidents' consent only in the event of a retaliatory nuclear strike. But I do not believe that such strikes are possible. In general I cannot imagine that a nuclear missile would ever be launched from one continent against another. That would be disastrous. Although, regrettably, many people talk about a modern world war in dilettante fashion, claiming that if there were a conventional war it would not be as terrible as a nuclear war. Let us not be naive. The fact is that even conventional means of attack are mainly targeted on missile installations, nuclear power stations, chemical plants, and major hydroelectric power stations. So that a nuclear war is possible even if conventional means are used. [passage omitted]

Russian Author Accused of Revealing CW Secrets MK2310095592 Moscow NEZAVISIMAYA GAZETA in Russian 23 Oct 92 p 1

["NG" report: "Chemical Armament Continues?"]

[Text] Russian Federation Security Ministry staffers have arrested Vil Mirzayanov, one of the authors of the article "Poisoned Policy" published in MOSKOVSKIYE NOVOSTI for 20 September 1992. According to the Russian Federation Security Ministry Public Relations Center, the article revealed some information that constitutes a state secret. With the general prosecutor's approval, the journalist's apartment was searched, turning up proof confirming his participation in committing an action falling under Article 75 of the RSFSR Criminal Code.

The article claimed that the State Union Organic Chemistry and Technology Research Institute in Moscow has developed a new toxin and, moreover, has started production of industrial batches of binary weapons based on this toxin. According to the authors, these munitions underwent field testing at a facility on the Ustyurt plateau near the city of Nukus in the first quarter of this year.

Clearly, it is chiefly Vil Mirzayanov, a former staffer of the State Union Organic Chemistry and Technology Research Institute, who could have known such sensitive details. His coauthor, Professor Lev Fedorov, is a witness. As he told a NEZAVISIMAYA GAZETA correspondent, he has no information about the use of secret documents in preparing the article, and he believes the facts cited in it were no secret to many of his colleagues.

The very fact of the arrest for "disclosing information" looks rather significant against the background of the fact that the draft convention prohibiting the development of chemical weapons referred to the 47th conference of the UN General Assembly was adopted this fall.

Russian Treatment of Nuclear Materials Described

AU1710161392

[Editorial Report] Vienna ORF Television Network in German at 1915 GMT on 16 October carries a documentary by ORF reporter Claus Mandl titled "Hellfire" on the treatment of nuclear materials in Russia.

The report includes video of Krasnoyarsk 26 and its production facility for weapons of mass destruction, information about the mechanisms of simple nuclear and neutron bombs, small tactical weapons, video on Cheyenne Mountain and the North American Aerospace Defense Command, video on the Tomsk 7 facility where nuclear weapons used formerly produced, video on the Kurchatov Institute in Moscow, and interviews with several Russian Government officials and nuclear experts from other countries.

Gennadiy Khandorin, director of the Siberian Chemical Combine in Tomsk, discusses conversion to production of civilian products. "Conversion is now taking place in our combine. Our problem is that we are producing uranium, which means that we are a military facility. It is difficult to retool such a military facility for peaceful purposes because we are highly specialized. This is not easy. No one can change overnight from production of tanks, for instance, to tractors, and it is impossible to turn a bomber into a passenger plane."

As video of very rusty train cars for nuclear transports and the wooden cooling towers of a nuclear power plant are shown, the reporter wonders about the safety of the operation. It is noted that "nuclear waste is stored in Tomsk 7 under conditions which would be unacceptable even for a municipal sewer in the west." In the restricted area there is now a slogan, according to the reporter: "Get out and go to al-Quadhdhafi." An unidentified worker, shown only from the back, says: "Basically, I would agree to working abroad under normal conditions." When asked what he means, he answers: "If I had a normal standard of living and would be paid accordingly." He says that "most of the young people" among his colleagues "would understand him." When he is asked whether he is afraid "of the KGB or someone else" if he talks about these matters, the man refuses to answer.

The report continues with an interview with Hans Blix, director general of the International Atomic Energy Agency (IAEA) in Vienna. The reporter notes that "from far away, from the viewpoint of the IAEA in Vienna, the desire to leave for Libya is not to be taken too seriously." Blix says: "Well, the Russians have built a research reactor in Tripoli, and I think that there are still some Russians there. I would not be surprised if some more were to go there. Of course, it depends on the intentions of the people who go abroad. There may be the temptation for some unemployed Russians to work in the arms industry of a developing country.

We have not seen this happening. We have seen evidence of western Europeans working in Iraq," however.

Asked about the smuggling of nuclear material, Blix says "this world is not free of risks anywhere. It would be irresponsible to say that there is no risk. So far we have not found any dangerous material and I hope that we will not find any in the future, however. Steps are being taken to take the weapons-grade plutonium from the CIS republics to Russia, to central sites controlled by the military. Okay, it is not completely without danger, neither during transport nor storage, but is there no danger in France, Great Britain, or the United States. There is no such thing as the total absence of risk."

The reporter notes: "When the IAEA director reassures the public, he does this without any guarantees. The IAEA does not have any authority concerning the disaster with the nuclear weapons and thus no responsibility. As long as it does not have a mandate from the member states, it is not interested in warheads."

Blix says: "The agency has been tasked by the governments of its members, which includes Austria, to monitor the peaceful use of nuclear energy. We do not monitor weapons, we do not supervise their disassembly, and we do not check on their storage. Thus, if you ask whether it would not be my task to warn, to warn against something for which we do not have any responsibility—no, it is not my task. We are holding an intellectual discussion about the risks, but the IALA does not play any role in the transport or disassembly of the bombs. The IAEA may be faced with a task if the highly enriched material is removed from the bombs and transferred to the civilian sector. This has been discussed. This is a possibility, but not for this year or the next. I have publicly said that this is something where the experience of the agency will come into play."

The report shows video of the Hanau nuclear reprocessing plant in Germany and the Superphenix reactor in France. Dr. Claus Berke, head of the German Nuclear Forum, and Dr. Wolfgang Thomas of the Society for Reactor Safety both comment on the treatment of nuclear material and reactor safety.

When the report returns to Russia, Nuclear Energy Minister Viktor Mikhaylov recommends measures for dealing with the plutonium remaining in Russia. "Of course, there is no point in just destroying the material. Horrendous amounts of money were spent on the production of uranium and plutonium—in the Soviet Union and, above all, in Russia. Really horrendous amounts of money were spent on this material. Now we have a very difficult economic situation in our country and we cannot wait 20 years to solve our problems. We have to do this in one-third of this time. The entire international community must be interested in this. I believe that it is also the only chance of the people alive today to get rid of 90 percent of the nuclear weapons. This must be done in a way that the use of these materials makes money so that the costs that arise for us and the west are compensated. For instance, storage containers must be produced and each container is very expensive, costing \$4,000 to \$5,000. For a nuclear warhead you need three to

four containers. Thus, we need about 100,000 containers. Therefore, we can do only do this if we cooperate," says Mikhaylov.

The report continues with a description of the Kurchatov Institute in Moscow, which developed the Soviet nuclear bomb. Aleksandr Kalugin, who was responsible for the nuclear program in the past, is asked whether he feels safe in his own country. "No. I would prefer to get rid of the material. One could, perhaps, mix it with plutonium from nuclear power plants, with very radioactive material. By the way, weapons grade plutonium is bad because one cannot detect it, not even large amounts. If you put it in your pocket and walk out of the door, it cannot be detected with any instruments if it is weapons-grade plutonium," says Kalugin. When asked what he thinks about plutonium now after spending so many years producing it, Kalugin says: "I think that despite everything, plutonium must be destroyed. This is my opinion." Referring to the idealism of nuclear experts in the past, Kalugin says: "Many of us think that all our lives were spent in vain, that everything we did was completely worthless and, moreover, that this period of 75 years of communist construction should be crossed out of history. Against the background of these enormous changes, the issue of plutonium is a very small problem. This is my personal opinion."

After a description of the Chetek Atom organization in Moscow, which wants to use nuclear weapons to destroy nuclear waste in underground explosions, the report concludes with a film clip of a Russian landscape shaken by underground nuclear tests.

Russia Needs \$150 Billion for Defense Conversion OW1510005392 Moscow INTERFAX in English 1837 GMT 14 Oct 92

[Report by Andrey Pershin, Andrey Petrovsky, and Vladimir Shishlin; edited by Boris Grishchenko; from the "Presidential Bulletin" feature—transmitted via KYODO]

[Text] President Yeltsin's aide on military conversion matters Mikhail Malei [name as received] in an interview with IF [INTERFAX] has said the president almost agreed to his proposal for the department of arms exports and militarytechnical cooperation to be weaned away from the foreign trade ministry and turned into an independent structure.

Malei says the rapid conversion of defence-related industries must not be allowed to affect the country's defence or economic interests, including Russian weapons exports. The Russian Federation is dead set to compete in international arms markets, which Malei says can help Russia derive from \$ 4 bln [billion] to \$12 bln in annual profit.

On conversion, Malei said it would take 15 years and \$150 bln spending to convert the country's military industrial complex to civilian production. He said about 70 percent of the defence industry's capacity will have been converted over the period.

The Russian official said president Yeltsin had ordered for setting up as many as 70 national centres for converting nuclear, missile, shipbuilding and aviation industries.

Deputy prime minister Georgiy Khizha who is responsible for the military-industrial complex is unhappy about a sweeping conversion campaign which, he said, slashed Russia's arms manufacturing by 67 percent in a short period of time. He was speaking at an international conference on the conversion of aerospace industry in Moscow on Tuesday.

Khizha called for the aerospace industry to be given a special priority in the government's conversion plan. He spoke of work now nearing completion on Russia's national industrial policy which would define the industry's place in international cooperation. "Our partners must realise, he said, that further attempts to block Russia's breakthrough into the world market would bring no benefit to them, let alone help implement Russia's conversion plan".

Russia Decrees Defense Export Controls

92UM1369B Moscow ROSSIYSKIYE VESTI in Russian 30 Jul 92 p 4

[Decree of the Russian Federation Government of 5 July 1992, No 469, Moscow, on Approving the List of Individual Types of Raw Products, Materials, Equipment, Technology and Scientific-Technical Information Employed in Developing Weapons and Military Equipment, the Exports of Which Are Controlled and Carried Out Under License in 1992-1993]

[Text] The Russian Federation Government hereby decrees:

To approve the proposed list of individual types of raw products, materials, equipment, technology and scientifictechnical information employed in developing weapons and military equipment, the export of which is controlled and carried out under licenses in 1992-1993.

Only one-time licenses are to be issued for the exporting of raw products, materials, equipment, technology and scientific-technical information included on the designated list.

To establish that the principals in business activity on the territory of the Russian Federation, regardless of the forms of ownership, in the concluding of the contracts (agreements, treaties) for the export of goods (work, services) included on the list in accord with Point 1 of the current decree without fail should give heed to the obligations of the importer that these goods (work, services) will not be used directly or indirectly in the aim of producing weapons and military equipment as well as be re-exported or turned over to anyone whosoever without the written permission for this from the exporter who has approval from the Russian Federation Export Control Commission Under the Russian Federation Government.

Obligations relating to guarantees should be specially drawn up by the importer at the state body of the importer country which is in charge of foreign economic activities for each specific transaction for the exporting of goods (work, services) included on the list, if such obligations are not stipulated by the Russian Federation international treaties.

A copy of the document providing the appropriate importer guarantees should be attached to the exporter's request for the granting of a license.

The Russian Federation Ministry of Foreign Economic Affairs is to issue licenses for the exporting of goods (work, services) included on the list only with the corresponding ruling from the Russian Federation Export Control Commission Under the Russian Federation Government.

[Signed] Ye. Gaydar

Russia To Cease Building Nuclear Subs in Far East

OW2110094092 Vladivostok Radio Vladivostok Network in Russian 0815 GMT 16 Oct 92

[From the "Pacific Ocean" program]

[Text] Komsomolsk-Na-Amure can at last relax. Construction of nuclear submarines has come to an end. The same goes for the Production Association, the Leninskiy Komsomol Plant. The conference of the workers collective has adopted a decision to transform it into a joint stock association, the Amurskiy Shipbuilding Plant, and the controlling packet of shares has been handed over to the workers themselves. The new joint stock association proposes to concern itself with building civilian vessels and the production of consumer goods, for which there are many orders.

Russian Northern Fleet Removes Tactical N-Arms LD2010131292 Moscow ITAR-TASS in English 1215 GMT 20 Oct 92

[By ITAR-TASS correspondent Vasiliy Belousov]

[Text] Murmansk October 20 TASS—The Russian Northern Fleet has removed tactical nuclear weapons from its ships in keeping with an international agreement on reduction of nuclear weapons, Admiral Oleg Yerofeyev, commander of the Northern Fleet, said at a news conference on Tuesday.

Simultaneously, the number of warships has been reduced, the admiral said. "However, the move has not affected the fleet's capabilities," he noted. The admiral stressed that the fleet had strengthened its might due to increased skills of sailors to handle new kinds of weapons and military hardware.

"Servicemen of the Northern Fleet will do their best to protect Russian sea borders," the admiral said.

Reported Fire on Northern Fleet Submarine Denied

PM1610132592 Moscow Russian Television Network in Russian 1100 GMT 11 Oct 92

[Video report from Murmansk by G. Smirnova and N. Durov, from the "Vesti" newscast; figures in brackets denote broadcast time in GMT in hours, minutes, and seconds]

[Text] [111142] [Smirnova] SOVETSKIY MURMAN published a news report revealing, and I quote, "certain details of an incident involving a Northern Fleet nuclear submarine which took place in October this year in the Barents Sea."

Immediately after the report's publication, we asked the fleet's command to comment on this news.

[V. Paroshin, deputy commander of the Northern Fleet] There was no fire aboard the submarine. There was a short-circuit in an automatic device of an AC generator electrical panel, however. As a result of this short-circuit, the generator was shut down. This unit was just one of many AC sources, including the current required for the nuclear power installation. Subsequently, the nuclear power installation continued to operate without any restrictions. There were no changes whatever in background radiation. [Video focuses on Northern Fleet Press Center statement]

Russia Urged To Assist Arzamas-16 Nuclear Station

LD2310120192 Moscow Radio Rossii Network in Russian 0600 GMT 23 Oct 92

[Text] The federal nuclear centre in the town of Arzamas-16 might have its electricity and gas supplies cut off. This stems primarily from the possibility of municipal sanctions due to nonpayment of energy bills. There are also claims from other services and organizations.

A telegram to the Russian government calling for urgent material assistance has been sent from the nuclear citadel, which is experiencing hard times.

Ukraine Holds Talks on Nuclear Accidents WS1910133692 Kiev BUSINESS UKRAYINA

in Ukrainian Oct 92 No. 39 p 2

[Text] An international seminar devoted to accidents at

nuclear power stations was held 29 September through 2 October in Pushcha-Voditsa, near Kiev. It is this type of accident that occurred in April, 1986, in Chernobyl. This fact influenced the selection of the venue for the conference which was organized by the Ukrainian State Nuclear Board, the French Nuclear Association, and the Ukrainian Nuclear Energy Office. Specialists from Germany, Russia, Finland, Czechoslovakia, and some other European countries also took part in the conference.

"The idea of such a conference came from the Ukrainian side," said Georgiy Kopchynskiy, first deputy director of the Ukrainian State Nuclear Board. "France has accumulated great experience in the use of nuclear energy, which will be useful for our specialists. The objective of the conference is the prevention of nuclear plant accidents as well as the study of security issues based on emergency cases of RBMK and VVR types of reactors. On their visit to Chernobyl, the participants acquainted themselves with the progress of work aimed at the closure of all units in 1993 and directed by the Supreme Council and the Ukrainian Government."

"We, in turn, are interested in the experience of Ukrainian atomic specialists in the liquidation of the consequences of the Chernobyl melt-down," adds the chief nuclear security inspector from Electricite de France, Pierre Tanguy, the leader of the French delegation. "This kind of accident is just impossible in France, and nuclear power engineering enjoys everyone's confidence. At present, our 55 nuclear

power stations produce three-fourths of the electricity consumed in the entire country. We keep improving the power plant equipment and are working together with German specialists on new-generation reactors.

Michelle Otrique, branch director of Isfakhan Company of France, cited an interesting fact.

"A week before my trip to Ukraine, I watched the program about Chernobyl on French television," he said. "My friends and I wanted to get a "backyard" look at its creation. And what would you think? It turned out that it had been filmed someplace in Kazakhstan. Different kinds of horrors that never occurred in Ukraine were shown. We need true, reliable information about what measures are taken to ensure security at the nuclear power plants, what are the future prospects for this very important industry, what new experience has been accumulated by the world."

Ukraine Declares Intention To Join NPT Treaty

AU2110115092 Kiev Radio Ukraine World Service in Ukrainian 1100 GMT 21 Oct 92

[Excerpt] Ukraine intends to join the Nuclear Nonproliferation Treaty in the near future and to place all of its nuclear power plants and all its fissile materials under the control of the International Atomic Energy Agency. This was stated on Tuesday by Yelchenko, Ukraine's representative in the special political committee of the UN General Assembly in his speech on the issue of the effect of atomic radiation. [passage omitted]

Ukraine's Morozov Describes New Military Doctrine

AU2210124992 Kiev Radio Ukraine World Service in Ukrainian 1100 GMT 22 Oct 92

[Text] Yesterday, Ukraine's Defense Minister Kostyantyn Morozov met with the republic's people's deputies. He briefed them on the main (?principles) of the Ukrainian state's military doctrine. It had been submitted to the Supreme Council for consideration and is a concise, but, at the same time, well-weighed political document elaborated by military specialists with the participation of parliamentarians and also with the help of some specialists from other spheres.

At yesterday's meeting, problems of the attainment by Ukraine, in the future, of the status of a nuclear-free power were discussed. Kostyantyn Morozov pointed out that this is an official political course that was, incidentally, approved by our parliament and that it is only the parliament that has the right, if necessary, to alter this course or introduce corresponding corrections into it.

The people's deputies, on their part, stressed that, perhaps, it would be worthwhile for Ukraine to take an obligation on assuming full responsibility for the control over these weapons for the period while the strategic nuclear weapons are being destroyed on its territory.

The Kiev [word indistinct] meeting also discussed the need to strengthen social protection of Ukrainian servicemen.

Lithuania, INES Sign Nuclear Weapons Agreement

WS1910130692 Vilnius ELTA NEWS BULLETIN in English 1810 GMT 16 Oct 92

[From ELTA "NEWS BULLETIN" No. 102]

[Text] 16 October 1992—At the Lithuanian Ministry of Energetics the Republic of Lithuania and International Nuclear Energetics System (INES) have signed an agreement on "The guarantee forbidding the spread of nuclear weapons in the Republic of Lithuania".

INES will establish in Lithuania an account system for nuclear and radioactive materials which will enable Lithuania to cooperate with other countries in the field of nuclear energetics, to purchase equipment and nuclear fuel without any limitations.

Belarus, U.S. Agree To Dismantle Nuclear Weapons

LD2310090292 Moscow ITAR-TASS in English 0945 GMT 23 Oct 92

[By ITAR-TASS correspondent Igor Barsukov]

[Text] Washington October 23 TASS—The United States and Belarus signed three agreements this Thursday on bilateral cooperation in dismantling nuclear armaments and on the non-proliferation of mass destruction weapons.

The main agreement, which lays the legal foundation for cooperation in this sphere, was signed by U.S. Under Secretary for Security Assistance Frank Wisner and First Deputy Defence Minister of Belarus Aleksandr Tushinskiy, who is currently on a visit here.

Concrete aspects of cooperation in dismantling nuclear armaments and ensuring the non-proliferation of mass destruction weapons will be regulated by two agreements, which were signed by U.S. First Deputy Secretary of Defence Donald Atwood and Tushinskiy. In keeping with one of them, the United States will provide Belarus with equipment and outfit to ensure the safety of servicemen during the liquidation of nuclear weapons and in case of accidents during the transportation of nucler warheads. The United States will allocate 5 million dollars for this purpose.

In accordance with the other agreement, the Pentagon will provide the Belarus Defence Ministry with equipment and will help it train specialists and establish dependable control over mass annihilation weapons and technologies for their development in order to prevent them from spreading beyond the bounds of the country. The United States has allocated 1 million dollars for this purpose.

Krasnoyarsk Plutonium Plant Faces Conversion

PM2110145192 Moscow KOMSOMOLSKAYA PRAVDA in Russian 20 Oct 92 p 2

[Report by V. Nelyubin: "Mountains Cause Misfortune from Excess of Cleverness"]

[Text] Our "rafik" moved off from the asphalt and slowly stumbled along the sleepers of the railroad track disappearing into the tunnel. The outwardly utterly unremarkable "hole" in the mountain quite rapidly displayed its extraordinariness. And it was not even a matter of its length or the several locked gates and the three document checks. The poet was wrong, it turns out that not all "tunnels emerge into the light." Our tunnel led deep into the Siberian ore mines, into a gigantic underground city whose three galleries accommodate the shops of what only yesterday was a top secret establishment—the Krasnoyarsk mining and chemical combine. Here, 200 meters down, far from curious eyes, weapons-grade plutonium has been produced for the past 35 years.

Beria's department started work here back in the late forties. Over 60,000 prisoners chipped at the intransigent Sayanskiy rocks, digging deeper and deeper into the ground. In 1953, after the death of the father and teacher, they were replaced by military construction workers. And five years later the first nuclear reactor started to operate here—Siberian plutonium had arrived. On the rocky shore of the Yenisey it was not even a metropolis but something more imposing without, so the specialists say, a counterpart in the world, which was carved out. Its dimensions may be judged by the fact that every hour 5.5 million cubic meters of air are pumped underground into the combine's shops and living premises.

Today the combine is experiencing hard times. Two of its three reactors have been stopped: The international situation has changed and requirements for weapons-grade plutonium have declined drastically.

"We are accelerating the pace of conversion," says Pavel Morozov, the combine's deputy chief engineer. "We have set up the production of printed circuit boards, transformer units, and scans [razvertki] for the 'Rassvet' monochrome television sets produced in Krasnoyarsk. We have concluded a contract with the Samsung firm..."

But all this is in the long term, and meanwhile production profitability is falling and because of the lack of funds housing construction is having to be curtailed and a conflict is developing in the collective over the unsatisfactory wages. But the most alarming thing is that today the direction in which the combine will develop further is unclear. Its leading specialists are convinced that the only correct path is the further development and improvement of the processing and storage of used fuel from nuclear power stations. (Today the only storage facility in the CIS for waste from reactors of the VVER-1000 type is at Krasnoyarsk-26).

WEST EUROPE

FRANCE

Nuclear Energy Agreement Expected With Pakistan

AU2110085092 Paris AFP in English 0157 GMT 21 Oct 92

[Text] Paris, Oct 21 (AFP)—France and Pakistan are "willing to sign" an agreement on nuclear energy for civilian purposes, according to visiting Pakistani Foreign Ministry secretary-general Azram Zarki.

"France and Pakistan are willing to sign a framework agreement. We hope the agreement will be finalized in the near future," he told journalists here on Tuesday.

Zarki said the agreement would concern only the applications of nuclear energy in the fields of medical research, agriculture and protection against radiation hazards.

Zarki, who was here for routine talks with his French counterpart Serge Boidevaix, said he had not discussed stalled plans for France to build a nuclear power station in Pakistan.

Before going ahead with the project, France has insisted that Pakistan must allow full inspections of its nuclear installations to ensure it is not using them to produce nuclear weapons. Pakistan has refused to submit to inspections until India, its neighbour and rival, does likewise.

Zarki said he had discussed a proposal by Pakistan's Prime Minister Nawaz Sharif, who was in France last January, for a nuclear-free zone in the west Asia region, however.

Pakistan's relations with France were good, Zarki said adding that Pakistan was eager to improve them further with more economic exchanges. He said a delegation of French businessmen would visit Pakistan next year and he invited France to participate in his country's industrial development.

Referring to the expanding ties between Pakistan and the formerly Soviet republics of Central Asia, Zarki said his country could act as intermediary between these newly independent states and the West.

"If countries in the West, including France want access to these regions, Pakistan will be the easiest route," he said.

GERMANY

Bonn To Fund Soviet Nuclear Weapon Destruction

AU2310101292 Berlin BERLINER ZEITUNG in German 20 Oct 92 p 4

[Report by Dietmar Seher: "Help for Nuclear Disarmament"]

[Text] Bonn—Germany will help with massive financial assistance to destroy formerly Soviet nuclear weapons, which is also a first reaction to many attempts by criminals to smuggle nuclear material to other countries.

According to information obtained by BERLINER ZEI-TUNG, the Bundestag Budget Committee has decided to allocate DM10 million from the Foreign Ministry budget for this purpose. The aid should not be paid in cash but provided in the form of transportation, protective and safety equipment, measuring instruments, and basic and advanced training.

In the former Soviet Union 33,000 nuclear warheads have to be destroyed. Free Democratic Party Bundestag Deputy Carl-Ludwig Thiele says that "these weapons and the biological and chemical combat agents are a danger to the world after the end of the cold war." Direct disarmament aid to the CIS was not intended originally. Only as a result of certain events—not only the smuggling affairs but also the quarrels among the CIS governments about the possession of the weapons—did the Bundestag Budget committee act.

The smuggling scandals are putting particular pressure on the FRG Government. The Social Democratic Party of Germany demands expansion of the Military Materiel Control Law, as 10 years ago an internal federal study said that one day the FRG might become the victim of nuclear blackmail by criminals....

Defense Minister Ruehe Outlines Nuclear Strategy

AU2210093792 Hamburg ARD Television Network in German 2130 GMT 21 Oct 92

[Interview with Defense Minister Volker Ruehe by Heinz Wickert on 21 October; place not given—recorded]

[Excerpt] [passage omitted] [Wickert] You attended the meeting of the NATO Nuclear Planning Group. There it was affirmed again that the concept of the nuclear first strike would be adhered to. Why?

[Ruehe] I do not know what kind of information you have received. It is correct that we have reduced all the things that existed in the past in terms of nuclear strategy. The number of nuclear weapons has declined drastically, and in particular in Germany's interest i' must be clear that in the future, nuclear weapons will exist only to deter the use of the other side's nuclear weapons. This is a completely new strategy.

[Wickert] Yes, but the old strategy remains. One sticks to the nuclear first strike.

[Ruehe] No, this is not correct in this way. In Rome, we started to reorient the NATO strategy—this is called MC 400. In the meantime, there have been further changes—the collapse of the Soviet Union, the START agreement between the United States and the Soviet Union. For me, Gleneagles is an interim step, and I said so there. The debate will continue. What is most important is the fact that Germany's nuclear security dilemma—that over 40 years we were in the danger of using nuclear weapons on our own territory to deter the other side—has been abolished. This is the real great success that we have achieved this now that different rules apply.

[Wickert] And what are the different rules?

[Ruehe] Very importantly, that nuclear weapons are only political weapons and that we have really moved away from the precise target planning, which existed in the past; and that, by the way, we also want to make sure, together with the Americans, that the nuclear weapons, which exist as a legical property in the Soviet Union, are made safe and disposed of in a sensible way; that we want to help to provide safeguards for scientists, who have so far worked in the nuclear field so that the nuclear danger does not spread all over the world.

[Wickert] Thank you very much, Mr. Ruehe.

[Ruehe] You are welcome, Mr. Wickert.

Poles Arrested For Smuggling Radioactive Material

Caesium-137 Confiscated

LD1110185892 Warsaw Radio Warszawa Network in Polish 1800 GMT 11 Oct 92

[Report by Karol Sawicki from Bonn]

[Excerpts] The police in Frankfurt have arrested five Poles who had smuggled considerable amounts of radioactive materials to Germany.

[Correspondent] They were travelling in a white BMW bearing Warsaw registration plates. From unofficial reports it transpires that the police were waiting for them. The arrests were carried out at night in a hotel near the airport. One of the detained had a key to a locker at Frankfurt's main railroad station. A 20-centimeter container with Russian inscriptions was found there: It contained 200 grams of radioactive Caesium-137 isotope, one of the most dangerous radioactive substances.

In the car's trunk, in a plastic bag, was another container in which there was a similar amount of radioactive strontium-90. On the black market one gram of caesium costs between 120-150,000 German marks. [passage omitted]

Klaus Kinkel, the German minister of foreign affairs, has instructed German ambassadors in Warsaw, Moscow, Kiev, Minsk, Kalinin, Riga and Vilnius to request the respective governments to take action against the illegal export of fissile materials.

Investigation Detailed

AU1210143692 Hamburg BILD AM SONNTAG in German 11 Oct 92 p 4

[Report by E. Gors, V. Tackmann, and M. Witthoff: "Smuggling of Nuclear Material: Dangerous Locker at the Railway Station"]

[Text] Officials from the radiation recovery unit of the Frankfurt professional fire brigade had sealed off the whole area: Equipped with breathing apparatuses and Geiger counters, they carefully approached locker number 579 in the main railway station. They made the most frightening discovery of their entire career: an inconspicuous 20-cm metal container marked with the international symbol for radioactivity and Cyrillic letters. The Geiger counter ticked all the time: The container contained about 20 grams of caesium-137 and strontium-90.

A little later, the officials had to turn out once more. Their attention had been drawn to a BMW car with Polish license plates in central Frankfurt. The investigators had received a tipoff. They opened the trunk and discovered another nearly identical container covered by a plastic bag. Its deadly content was caesium-137.

Caesium-137 is one of the most dangerous radioactive substances. After the Chernobyl accident it scared the whole world. Those who are exposed to its radiation are likely to develop cancer. Nuclear physicists Gerald Kirchner from Bremen University stated: "The mere thought that caesium was stored largely unprotected in a car makes my hair stand on end."

The discovery made in Frankfurt—five Poles were arrested—is part of gigantic illegal deals with nuclear material that the German authorities are currently investigating. At the end of August, the German Krysztof Adamski (34) from Bad Schwalbach and three Poles were caught by the police. The four smugglers also carried caesium-137. Two of them are now in a special German hospital because they have been exposed to a high degree of radiation. The deadly substance comes from Vilnius (Lithuania). According to the investigators, large-scale trading with radioactive material is under way in the Community of Independent States and Poland.

In Germany, the search for radioactive material focuses mainly on the Ruhr area. The reason is that the investigators have learned from confiscated documents that 20 kg of uranium-235 are being illegally stored in Germany. Experts are convinced that the radioactive material is completely insufficiently protected. Security forces are afraid that the uranium might be sold to terrorists or to third countries. Uranium-235 is required to build atomic bombs. The 20 kg stored in Germany are estimated to be worth DM15 million.

Radioactive material—caesium-137—was also seized in Stuttgart. It was offered at DM150,000 there. One dealer was arrested.

Investigations are also under way in Hamburg. During a raid at the offices of an import-export company, comprehensive documents were confiscated. In a letter, the dealer had offered 1.5 kg of radioactive material at a price of DM120,000 per gram to a Danish company. The authorities are convinced that illegal dealings are involved here. Foreign Minister Klaus Kinkel has drawn the first conclusions: The German Embassies in Poland, Russia, Belarus, Ukraine, and the Baltic states have been instructed to demand additional border controls from the governments. At the same time, the federal government called on several East European governments to prevent the illegal export of nuclear material.

Interior Minister Rudolf Seiters told BILD AM SONNTAG that he wants to use the "close cooperation between the Federal Office of Criminal Investigation and the police authorities in Poland and Russia" to "stop the illegal trade with radioactive material."

The German security authorities suspect that the radioactive substances that reach the black market stem mainly from nuclear power plants, hospitals, and research institutions in the former Soviet Union. "Everything can be turned into money there to obtain foreign currency." Many smugglers may not know what they are transporting. Caesium is particularly dangerous. Theoretically, the amount discovered in Frankfurt is sufficient to contaminate thousands of people.

Neither at the railway station nor near the Polish car were people injured, however.

More on Uranium Smuggling

AU1810144492 Frankfurt/Main FRANKFURTER ALLGEMEINE in German 17 Oct 92 p 4

["Js" report: "Smugglers Offered Nuclear Warhead to Police Informant"]

[Text] Duesseldorf, 16 October-According to investigations so far, there have been no indications that weaponsgrade uranium 235 or even a nuclear warhead have been smuggled into the FRG. This has been announced by the Public Prosecutor's Office in Bochum, which is responsible for dealing with the smuggling of radioactive material, which was discovered in Frankfurt/Main last weekend [10-11 October]. In connection with this case, which has now been discovered, the investigating authorities have seized only a few grams of caesium 137 and strontium 90 along with 1 kg of caesium 133. All three materials cannot be used for the production of weapons. In the view of the investigating authorities, there are some indications that the offered material was intended to at ract customers for further, more dangerous deals. To combat such deals better in the future, Mr. Mastoff, head of the Bochum Public Prosecutor's Office, thinks that it is urgently necessary to have the Federal Office of Criminal Investigations conduct the investigations centrally.

Concerning the investigations of the latest case, in the course of which one German and two Poles were arrested, it was said in Bochum that on 14 September the Baden-Wuerttemberg Land Criminal Investigations office received a report by the Aalen Criminal Police that an informant from Kappel-Grafenhausen had managed to mediate the purchase of 1 kg of caesium 137 and 10 kg of uranium 235, 10 kg of uranium 238 and strontium 90, and a nuclear warhead from the CIS states. The subsequent investigations led to the informant's "negotiating partner," one of the three men who are now in detention. The Bochum Public Prosecutor's Office was informed of this on 2 October. Further investigations by the Baden-Wuerttemberg Land Criminal Investigations Office showed that the smuggler urged the purchase of 1 kg of caesium 137, because he needed money. As a result, the Bochum public prosecutor's office tried to discover the potential storage site of the radioactive material in order to prevent any dangers to the population. Independent of that, on 7 October police in Ettenheim and Kappeln-Grafenhausen found a container with caesium 137 in the informant's apartment as a result of investigations of the informant's son. According to the informant, this container was delivered on 6 October during his absence.

The next day the investigating officials found out that sales negotiations about 10 kg of uranium 235 were supposed to take place between the informant, the "negotiating partner," and two persons who have not been positively identified so far, in a hotel in Frankfurt. During the meeting, which took place in the early afternoon, 10 kg of uranium 235 were offered for the price of \$300,000. The merchandise was supposed to be handed over on 12 October in a hotel in Karlsruhe-Ettlingen. The deal did not take place, however. At the order of the Bochum Public Prosecutor's Office, the

"negotiating partner" and two Polish citizens were arrested in Frankfurt in the afternoon of 9 October and were transferred to Bochum.

Bundestag Expresses Concern

AU1910082292 Frankfurt/Main FRANKFURTER ALLGEMEINE in German 17 Oct 92 p 4

["hal" report: "Bundestag Worried About Nuclear Smug-gling"]

[Text] Bonn, 16 October—On the occasion of a Bundestag debate on reactor safety in Central and Eastern Europe, politicians of all parties have expressed concern about the increased smuggling of radioactive material. Hesse Environment Minister Fischer (Greens) called for better coordination of the cooperation between authorities, federal government, and laender. The laender alone are not able to cope with this problem, which constitutes a greater danger than drug trafficking. The FRG Government must be enabled to react to this new danger already in the countries of origin, if possible, or at the borders.

Social Democratic Party of Germany [SPD] Bundestag Deputy Mueller said that the current guidelines for coping with nuclear smuggling are insufficient. Germany is threatened with becoming a center for the smuggling of radioactive material. FRG Justice Minister Leutheusser-Schnarrenberger (Free Democratic Party of Germany) has meanwhile announced that harsher sentences for smugglers are to come into force next spring at the latest. The possession of radioactive material without a corresponding permit is liable to prosecution. The import and export of nuclear fuels, such as uranium, is also liable to prosecution, not, however, the import and export of radioactive wastes, such as caesium or strontium. This is to be changed. The prison term for smuggling is to be raised form three to five years, in serious cases to 10 years.

With a view to Fischer's demands, the FRG Environment Ministry pointed out that the laender remain responsible for prosecuting smuggling and that the radio action protection authorities act only if a request for aid is made. The Ministry estimates that since May there have been about six to eight cases of nuclear smuggling, with the radioactive materials coming from Central European countries. The smugglers are either completely ignorant or they have illusion about the sale of the material. On the one hand, what is imported is low-grade uranium 235 that is part of the waste material from the production of fuel rods; on the other, caesium or strontium are imported, which could theoretically be used in medicine, in calibrating measuring instruments, or in smoke-detection instruments. There is no market for all these materials in the western world, however. The plutonium, which is needed for the construction of nuclear bombs, has so far not been smuggled to Germany, it was said in the Environment Ministry. For countries that are interested in nuclear bombs, it is more useful to buy an entire warhead in Eastern Europe or to hire the scientists they need for the construction and bring them into the country together with the plutonium. It is rather pointless to take the route via Germany in this endeavor.

While the SPD Bundestag deputies used the Bundestag debate to call once again for a renunciation of nuclear energy in Germany and also in Central and Eastern Europe, the deputies of the Christian Democratic Union [CDU] Christian Social Union advocated the view that nuclear energy from safe reactors continues to be acceptable. All deputies opposed the fact that the Chernobyl reactor is to be put into operation again, however. CDU Secretary General Hintze spoke of a "danger for all of mankind." Even if Ukraine needs energy, this energy must not be produced by reactors of a type that are so prone to accidents. Hitnze called on the EC to ensure energy supplies to Ukraine this winter by means of the European electricity network. The Bundestag called on the FRG Government to ensure a speedier implementation of the aid programs for making the east European nuclear power plants safer. The funds made available by the EC so far to make the CIS power plants safer amount to about DM300 million for 1991 and 1992. Because of bureaucratic obstacles in the CIS they are used only with great hesitation, however.

Mr. Wieczorek (CDU), parliamentary state secretary in the Environment Ministry, said that the financing of the international action program, which was decided at the international economic summit in Munich, is still being negotiated. At that time, the seven most powerful industrialized nations agreed on providing \$5 to \$7 billion for the next five years for a short-term action program. Nuclear experts estimate, however, that about DM15 billion are needed to reequip the 57 East European nuclear power plants.

Illegal Nuclear Trade Activities Detailed

AU2010092092 Hamburg DER SPIEGEL in German 19 Oct 92 pp 153-155

[Unattributed report: "Seeking Their Fortune in the West"]

[Text] Germany is threatening to become a center of illegal trade with uranium, poison gas, and bacteria.

Molecular biologist Karsten Henco received an unusual offer in the spring. An agent from the biochemical scene offered bacterial strains "from Russian laboratories."

Henco, manager of a biotechnology company in the Rhineland, knew about this material from books. The stuff was suitable for developing biological weapons. The bacillus anthracis is considered an insidious pathogenic agent in the arsenal of biological warfare.

The biologist immediately sounded the alarm. He informed the Defense Ministry about the offer which looked "a bit fishy" to him.

Yet nothing happened. The gentlemen at the Defense Ministry claimed that they were not competent—and did not show interest. In addition, the Bundeswehr does not have such weapons, he was told.

In a similarly perplexed and helpless way, German security forces are reacting to warnings and reports about the dangerous material that is currently appearing on the black market. Through thousands of channels, businessmen, unemployed scientists, and blackmailers are currently trying to smuggle captured material from the former Soviet Union in portions into Germany. Foreign secret services, like the CIA and Israel's Mossad, have repeatedly warned their German colleagues against the stray bankrupt's assets from the East.

International weapons trade experts are also quite familiar with the problem. "The research laboratories are desperately trying to survive," Ulrich Albrecht from the Berlin Conflict Research Institute stated. In the Community of Independent States [CIS], "everybody is carrying out deals with everybody," and many dealers are seeking their fortune in the West."

Their arsenal includes everything that can kill people—from a new type of nerve gas to the old mustard gas from world War I, from nuclear warheads to bacilluses causing pestilence.

Dangerous quantities of caesium, cobalt, and uranium from eastern Europe were impounded by the customs investigators in Germany in the past few days. Radioactive material has been discovered in many places.

This year, the responsible official at the Federal Office of Criminal Investigation, Bernhard Ferchland, has registered "over 100 cases where dealers from the East claimed to possess nuclear material." The estimated number of unknown cases is enormous because "only very few dealers tell us about their trade," however.

The police reacts in an "unexperienced, unskilled, and clumsy way" to the new danger, BKA head Hans-Ludwig Zachert complained. The police are not only lacking knowhow, but also protective suits and transport containers.

Environment Minister Toepfer (Christian Democratic Union) has described the situations as "extraordinarily serious." "Dangerous substances" are vagabonding through the country and are no longer controllable. "This is a completely new situation," his Hesse counterpart Joschka Fischer stressed.

"In connection with nuclear power plants and the Hanau reprocessing plants we always talked only about averting dangers, about what might happen." Now the stuff is simply here—at the railway station and at the hotel."

The Greens minister witnessed the seizure of caesium and strontium in Frankfurt the week before last. The cesium-137 was hidden in a lead container in locker 579 at Frankfurt main railway station. The strontium-90 was discovered in the trunk of a BMW car with a Kattowitz license plate, which was parked in front of the Mondial hotel.

Three Poles apparently smuggled the radioactive material into Germany. "One could feel the people's fear. One cannot smell, see, or taste this horrible stuff," Fischer stressed.

The police had got on the track of the smugglers some time ago. At the office of the criminal police in Aalen in Baden-Wuerttemberg, a Pole appeared in the middle of September who wanted to organize the purchase of caesium, strontium, and 10 kg of uranium-235 for German authorities.

The security authorities were alarmed by the fact that the Pole mentioned casually that he could also procure a nuclear warhead from the CIS. Thus, the Baden-Wuerttemberg Criminal Office of Investigation used an undercover agent who pretended to be interested in buying nuclear material.

Since the main suspect Zbiginiew Fiutkowski lived in Wattenscheid, the Bochum public prosecutor took over the case. Telephone lines were tapped, an apartment in Kappel-Grafenhausen was searched, and a container with the radioactive cesium-137 was discovered.

On 9 October, Fiutkowski arranged a meeting with the undercover agent in Frankfurt, during which he offered 10 kg of uranium at \$300,000. The material was supposed to be handed over in Karlsruhe-Ettlingen three days later, but a special squad of the criminal police arrested the suspects.

The criminal police was also successful in southern Germany. Investigators recently uncovered a comprehensive network of osmium smugglers who allegedly wanted to carry out deals involving over DM90 million. The osmium originates probably from the CIS states and is sought after as a catalyzer.

A group trying to sell 2.2 kg of uranium-235 was busted in Bavaria last Tuesday [13 October]. A special police unit confiscated the radioactive material at a parking lot in southeast Munich. The seven suspects were arrested.

The background to many numerous illegal deals is unclear. Investigators wonder why smugglers transport cesium and strontium that not suitable for bombs to Germany. It seems totally unlikely that they really have access to bombs.

As far as the suppliers in the East are concerned, the authorities can merely speculate. We know that "members of the secret services" in the East and "senior military officials" supply most of the stuff.

There is no shortage of this material in the CIS states. Plutonium suitable for the production of weapons is stockpiled there, and tonnes of highly enriched uranium are being stored.

There is hardly any longer any control in the industrial sphere of the weapons-producing apparatus. The engineers designing ship reactors in St. Petersburg, for example, "are blessed with plutonium," researcher Albrecht stated. The bookkeeping department no longer registers losses, and the Vienna-based International Atomic Energy Agency only checks a single nuclear power plant in the vast nuclear state.

Germany is turning into a center of trade with radioactive materials, particularly because Germany is considered the capital of capitalism in the CIS states—where any kind of deals are possible.

Undercover agents and members of secret services have joined the scene, acting as buyers with considerable money. Experts of the criminal police fear that the activities of the dealers are only exercises for much larger deals. Some deals that have been uncovered so far might only be "test purchases," public prosecutors in Bonn suspect.

Even the transport of small quantities may be deadly for the transporters, however. Krzysztof Adamski, 34, was exposed to a deadly dose of radiation when smuggling cesium in a tin can in his jacket.

Even rare substances have allegedly reached the market. According to secret services, west European dealers have even smuggled tritium from Russia into Germany. The gaseous substance used for bombs facilitates the boosting of atomic bombs and increases their explosive power considerably.

To boost a bomb, only the tiny quantity of two to three grams of tritium is required. The substance is currently traded at a street value of about DM60,000 per gram. This is a special offer for regimes with secret nuclear plans.

Red mercury is harmless but has a high street value. Numerous myths are centered around red mercury. There are people who claim that, as a "highly explosive substance" (TAGESZEITUNG), it is equally suitable for atomic bombs and for coating fighter planes.

The substance, which is mainly used to fill teeth, is being offered at DM500,000 per kg in the German weapons dealing scene. This is quite a high price for ordinary mercury oxide.

The German businesswoman Rita Draxler, who used to procure historical military equipment, is considered a specialist for dubious deals with red mercury Europe-wide. The Bavarian Office of Criminal Investigation discovered that the blonde is being driven to meetings with customers in a black Porsche 911. She resided at the Ananas hotel in Vienna's fifth district several times and met business people there.

So far, the investigators have not found out the purpose of the deals. One thing is certain, however: A lot of money was involved.

Czech Carrying 'Several Kg' of Uranium Arrested AU1610214192 Frankfurt/Main FRANKFURTER RUNDSCHAU in German 16 Oct 92 p 1

["FR" report: "Smuggling of Uranium"]

[Text] Frankfurt/Main, 15 October—German security forces have uncovered attempts to smuggle uranium. As FRANKFURTER RUNDSCHAU learned on Thursday [15 October], a Czech citizen carrying several kg of uranium was arrested on Tuesday [13 October] in Bavaria.

It is unclear whether there is any link between this uranium and statements by Poles arrested in Frankfurt/Main who tried to smuggle radioactive material, according to which 20 kg of uranium-235 are to be sold in the west.

The Poles carried an unspecified quantity of caesium and strontium. The public prosecutor's office in Bochum has announced that it will provide more information on 16 October.

NORWAY

Germans Probe Oslo Firm's Arms Deals With Iran

92WP0312A Oslo AFTENPOSTEN in Norwegian 24 Sep 92 p 2

[Article by Arild M. Jonassen: "Oslo Company Would Sell Iran Weapons"]

[Text] Another Norwegian company has been under secret German investigation for attempts to sell weapons to Iran.

In 1986, the Oslo company Selbekk Trading, located at Baldersgate 9, was involved with Swiss citizen Walter Demuth and a German weapons dealer in a deal concerning deliveries of weapons to Iran. The German weapons dealer was later convicted of selling TOW missiles to Iran in exchange for hostages. The investigation of the Oslo firm Selbekk Trading may also have been what put German police on the track of the attempt by the Kongsberg Weapons Factory and the German firm Rheinmetalls to sell guns to the Iranians.

The Swiss, Walter Demuth, was the man who, in the years 1985 to 1987, negotiated with the state-owned Kongsberg Weapons Factory regarding sale of the 300 guns to the Revolutionary Guard in Iran.

The exotic trading partners are now coming to light in the wake of the weapon factory's Iran adventure. Apparently Norwegian companies were also tempted by the large earnings from the sale of war materials to the warring regimes in the Middle East.

The leader of Selbekk Trading tells AFTENPOSTEN that he, among other things, offered Demuth and his company, Helitrade, 15 helicopters and high-speed patrol boats. The Oslo man says that he knew that Iran's Revolutionary Guard was the recipient.

Selbekk Trading was not affected by the Norwegian criminal code, inasmuch the weapons were neither supposed to be shipped via Norway nor were produced here in our country. A gun deal with the Kongsberg Weapons Factory, on the other hand, would have been illegal, because the carriages for the guns, among other things, were produced in Norway.

AFTENPOSTEN has obtained confirmation at Oslo police headquarters that Selbekk Trading, like the Kongsberg Weapons Factory, was investigated by the German police. That is now also confirmed by the Norwegian owner of the firm, who was questioned by the police in Oslo at the request of German authorities.

The weapons dealer Walter Demuth from Switzerland first denied to AFTENPOSTEN any contact with Norwegian companies other than the Kongsberg Weapons Factory. Only after AFTENPOSTEN referred to the confirmation from Selbekk Trading and the Norwegian authorities did Demuth admit the contact with Selbekk Trading.

"I had contact with the Norwegian firm about deliveries of large amounts of cigarettes to Iran's Revolutionary Guard, but the Norwegians set too high a price," says Demuth. He also confirms the offer about purchase of Cobra helicopters and gunboats: "But it was not the type of helicopters and gunboats the Iranians wanted to have."

One of the German weapons dealers with whom Selbekk had contact was directly implicated in deliveries of TOW missiles to Iran. In 1988, the German was convicted for having sold 3,000 missiles in exchange for five American and two Israeli hostages.

This incredible story was confirmed by Walter Demuth. He relates that checks were confiscated at the German's home for a large, million-dollar amount, which had been sent by an Iranian minister. That is also seen from the documents following the interrogation of Selbekk Trading's leader in Oslo.

"The German weapons dealer met the chief of the Israeli intelligence organization, Mossad, in Tel Aviv. There he got photographs of the hostages who were supposed to be handed over. Incredibly enough, the TOW missiles were flown by Israeli planes to a base in Iran and exchanged for the hostages," says Demuth. He says that the Israelis could do that because the TOW missiles were old and inaccurate.

The owner of Selbekk Trading emphasizes to AFTEN-POSTEN that the contact with Demuth took place completely independently of the Kongsberg Weapon Factory's attempted sale of guns to Iran: "Demuth never mentioned those negotiations to me," he says.

The contact with the Oslo firm was established when one of the German weapons dealers was living in Norway.

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